THE SAFEGUARD OF SAILERS, OR Great Rutter.

CONTAINING,

The *Courses*, *Distances*, *Soundings*, *Floods*, and *Ebbs*; with the Marks for the Entring of sundry Harbours of *England*, *Scotland*, *France*, *Spain*, *Ireland*, *Flanders*, *Holland*, and the *Sounds* of *Denmark*; also the Coast of *Jutland* and *Norway*; with other Necessary RULES of COMMON NAVIGATION.

Collected out of the Newest and Largest *Waggoner*, and confirmed by the Practice and Experience of many able Pilots and Seamen; now Published for the Use and Benefit of all Honest Mariners.

London, Printed by *W. G.* for *Will. Fisher* at the *Post-Horn-Gate* near *Tower-Hill*, and *Benj. Hurlock* over against St. *Magnus* Church near *London-Bridge*. 1671.

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Sailors

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To the Friendly Readers, Sailers and Mariners.

SEeing by the poſitive and divine Law of God, all Men be generally bound any way they are able, to be profitable and helpful to their Brethren, Countrey, and Common-wealth, for whoſe ſakes, as much as for their own, they are Created: How can we but judge very hardly of their Meanings and Inventions, who publiſh and commit to the view of the World their Travels and Labours, to no other end, but to reap thereby either private gain or popular applauſe and commendation, as though indeed they were not thereunto by duty bound with their whole ſtudy, care, endevour, and all the faculties of the Mind whatſoever. From which ſort of ambitious perſons, as mine own Conſcience doth clearly exempt me, ſo yet, nevertheleſs, I fear that I ſhall hardly eſcape the hard cenſure and critical doom of many Linxes, *whoſe glancing penetrancy and quick Eye-ſight, being able (as the Fable reporteth) to look through a ſtone wall, will (no doubt) be ready enough to encounter my honeſt meaning in ſimplicity, and be a great deal forwarder to find faults than able to amend them. Howſoever ſuch ſevere* Stoicks *ſhall deign to think of me, my own Conſcience acquitteth me of all ſiniſter pretence; and what peremptory ſentence ſoever ſhall be pronounced upon me, I doubt not*

but the better moiety of the Marine ſort (for whoſe uſe this preſent Work is eſpecially publiſhed) will accept in worth theſe my Pains and Travels.

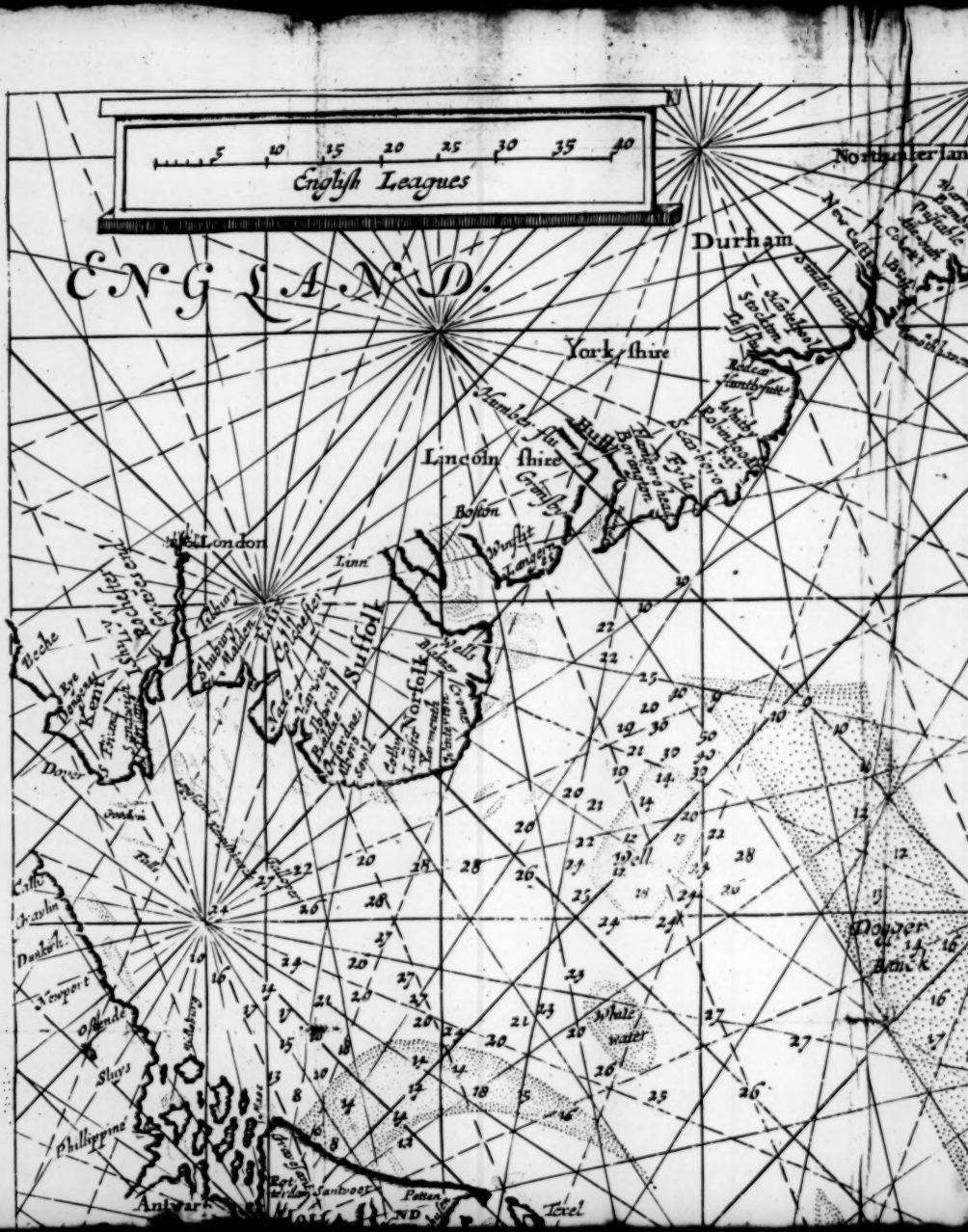
Neither need I to fear (as I hope) any ſiniſter conſtructions at the hands of thoſe, which with indifferencie will weigh my meaning, and without prejudicate opinions conſider my Labours.

For, as the Work is the Obſervations and Collections of divers and ſundry experimented Travellers; ſo, if they any where be found ſomewhat in matters of ſmall moment to jarr, or a little to diſagree, conſider that the judgments of ſo many men, be (and ever have been) divers and ſundry.

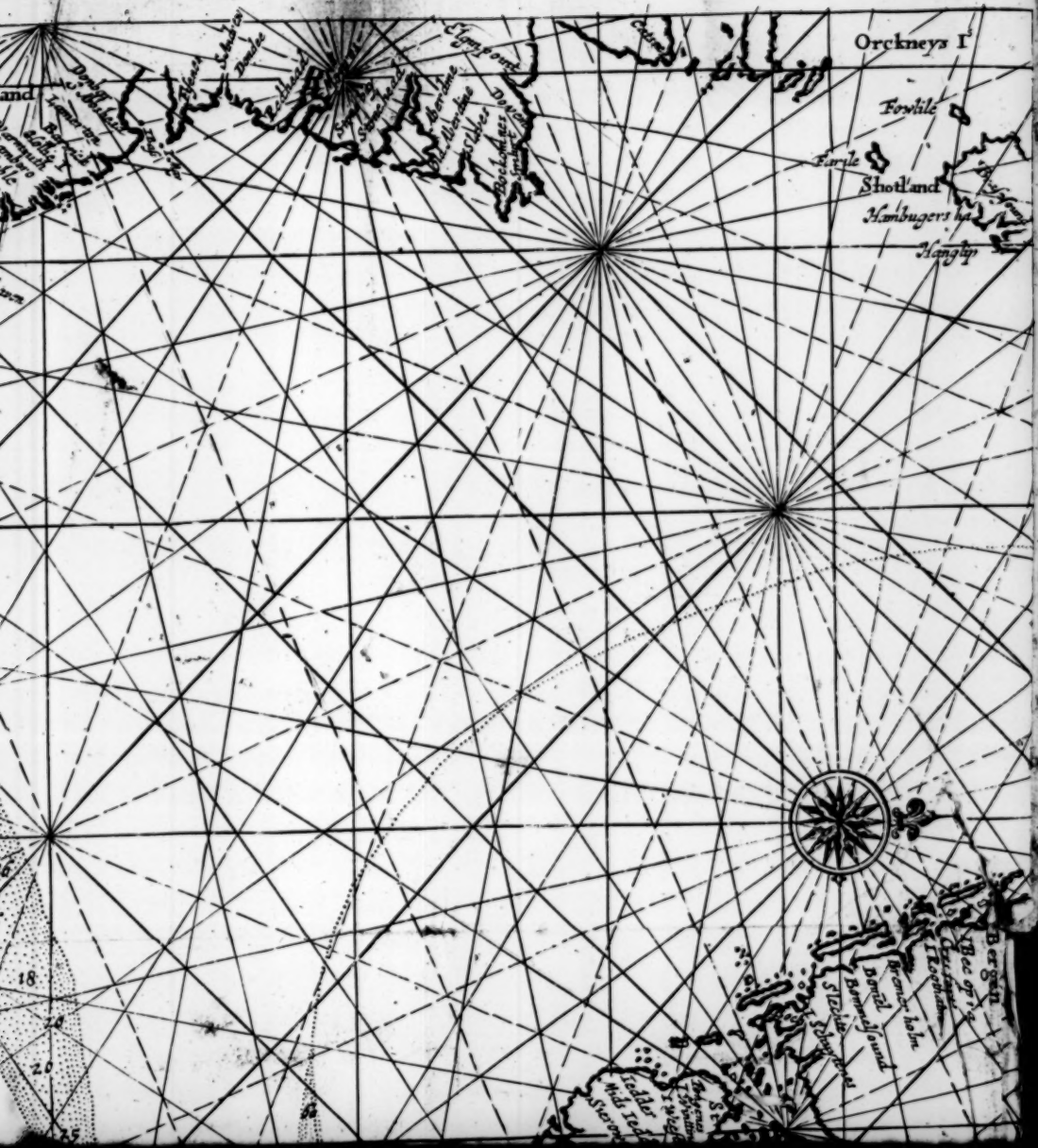
However, it is hoped, that this Book (as it is now Enlarged, with much care and pains) will prove very commodious to thoſe for whom it was chiefly intended; it containing the Courſes, Diſtances, Soundings, Floods *and* Ebbs, *with the* Marks *for the Entring of ſundry Harbours of* England, Scotland, France, Spain, Ireland, Flanders, Holland, *and the Sounds of* Denmark; *and alſo the Coaſts of* Jutland *and* Norway; *with other neceſſary Rules of Common Navigation. How much it hath been a long time deſired, is known to many, who will hereby receive ſatisfaction: And that it may prove as the Title repreſents, and as it truly was intended,* The Safeguard of Sailers, *is the deſire of him, who wiſhes all ſafety and Happineſs to them, and ſhall do, whilſt he is,*

Their Friend to Serve them,

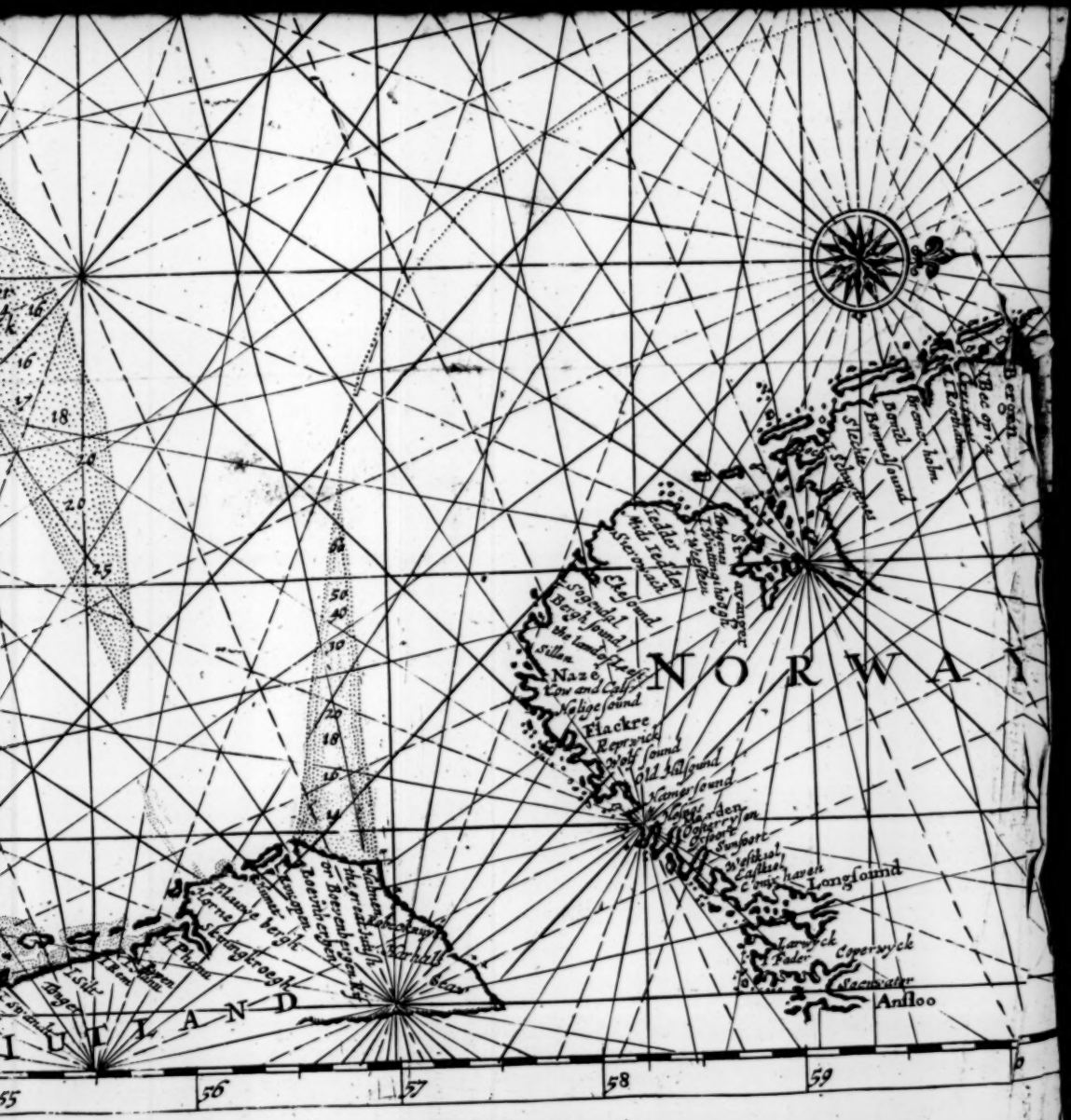
W. B.



English Leagues
5 10 15 20 25 30 35 40
ENGLAND.
Durham
York shire
Lincoln shire
London
Suffolk
Norfolk
Kent
Dover
Dogger Banck
Whitewater
Texel
Antwerp
Phillippine
Sluys
Ostende
Newport
Dunkirk
Calle
Graylin
Boston
Linn
Wells
Cromer
Yarmouth
Lowestoft
Ipswich
Harwich
Maldon
Chelmsford
Rochester
Gravesend
Tilbury
Shubury
Dover
Rye
Dongeness
Winslit
Langern
Grimsby
Hull
Humber flu
Bridlington
Scarboro
Fyla
Whitby
Rohinhood
Hartlepool
Stockton
Tessfluv
Sunderland
Cobett
Bush
Pustable
Northumberland


Orckneys I.
Fowlile
Farile
Shotland
Hambugers ha
Hanglip
Bergen
Bec opra
Bremer holm
Bomel
Bommelsound
Stechte
Tedder
18
20
20
25

A Chart
of the
NORTH SEA
By William Fisher on Tower Hill
Kent
Norfolk
Dover
Calle
Dunkirk
Newport
Ostende
Sluys
Phillippine
Antwarp
BRABANT
HOLLAND
Amsterdam
Petten
Texel
Fley
Harderwyck
Campen
FRISLAND
Emden
Jade
Breme
Weser
Elve fl.
Meldin
Dogger
Banck
White water
White Banck
W. Ems
Heilegeland
51
52
53
54
55


NORWAY
Bergen
Bremerholm
Bommelsound
Slechte
Stavanger
Iedder
Mids Iedder
Sierowach
Eksound
Sogendal
Bergh sound
Sillen
Naze
Cow and Calf
Nolige sound
Flackre
Reprwick
Wolf sound
Old Nilsound
Namersound
Harden
Oosterrysen
Sunsoort
Westkiol
Eastkiol
Longsound
Larwyck
Coperwyck
Sacuwater
Ansloo
Plauwe bergh
Skeningkroegh
Horne
Hanu
Bergh
Eeuwenbergen
Ronsoppen
Kalmen
Harhals
Seaw
IUTLAND
55
56
57
58
59

I. Demonstration.

Of the Sea-Coasts on the East *side of* England, *with their Marks, Sands, Buoys, and Beacons, from the River of* London *to* Newcastle; *and from thence to* Leeth *and* Edenbrough *in* Scotland.

BY two ways men may Sail into the River of *London*, from the Southwards along by the North *Foreland*, and from the Northwards along by the *Nats*. If you will Sail in there from the Southwards, then you must first shun the North *Foreland*, it is there shoal'd a good way from the shore, bring the North *Foreland* also not more Southerly from you then Southwest, that you do not run on against the North Grounds, which lyeth far to Sea-wards. Coming by the Land, run along by it, but come not too near it, that you lose sight of the Spire of the Steeple of *Margate* behind the Land, for then you should come too near it: But if you keep so far from the shore, that you can see the foresaid Steeple above the high Land, or keep it even in your sight, then you cannot take hurt of the South Grounds. Coming thwart of *Margate*, then you are past the foresaid Shoalds or South Grounds. Run then boldly towards the Shore, and within two Cables lengths along by it, for to avoid the North Grounds, which lyeth far to *Margate.*

the Southwards towards the Land, Sail on ſo Weſt all along by the Shore, until *Roculvers*, which are two Steeples upon one Church, come one in the other, and then you ſhall run in ſight of the firſt Buoy upon the *Laſts*, which lyeth upon the foreſaid marks of *Roculvers*, being by it you can alſo ſee the other Buoy lying like as the firſt; alſo on the North ſide, and over againſt it on the South ſide ſtandeth a Beacon, there you muſt Sail through betwixt them both, leaving the Buoy on the Star-board ſide, and the Beacon over againſt it on the Lar-board ſide. From thence you may with little Ships, or Ships of little draught, but not with Ships of great draught at high water, run over the *Swallow* Weſt Northweſt towards *Sheppy*, for it is there ſhoaldy water; with Ships of great draught you muſt run through the *Fiſhers deep* towards *Black-tail*. You can alſo run from *Margat* with ſmall Ships along by the ſhore upon the Lead at high water even unto *Sheppy*; but in Sailing along, you muſt caſt your Tides well, for the Flood falleth very ſtrong into the *Swallow*, and the Ebb to the contrary, very ſtrong out.

Sheppy. When men come by *Sheppy*, run within two Cables length
The Spaniard. along by it, for to avoid the Tail of the *Spaniard*, until you are paſt *Quinbrough*, edge then off from the South ſhore for to
The Nore. avoid the *Nore*, which is a Sand ſhooting off from the South Point of the River, a good way to the Eaſtwards upon the outermoſt end whereof ſtandeth always a Beacon whereby you may know it. Run along to the Northward of it, leaving it on the Lar-board ſide, and along in the middle of the Channel into the Sea-reach for to avoid the Grounds, which lieth off from the North ſhore, go in ſo along towards *Graves-end*.

To Sail with Ships of great draughts along by the North *Foreland* up into the *Thames*, you muſt when you are paſt the Buoy upon the *Laſts*, Sail through the *Fiſhers deep*, towards *Black-tail*, which lyeth from the ſecond Buoy upon the *Laſts*,
Fiſhers deep unto the firſt Buoy in the *Fiſhers deep* Northweſt, and Northweſt and by Weſt, which lyeth upon the North ſide of the Sand, which men do call the *Spaniard*; theſe two Buoys lie a great way one from the other.

Sailing from the Buoy upon the *Laſts*, it is a great way all ſhoal water, ſo that you muſt run over there with high water,

but

but coming near the Buoy upon the *Spaniard*, it is by little and little deeper water. He that will Sail over here, muſt reckon well his Tides, the Flood falleth there along towards the South-weſt almoſt thwart over the deep, and the ebb to the contrary.

The ſecond Buoy in the *Fiſhers deep*, you muſt leave on the Starboard, and the Buoy upon the *Spaniard* on the Larboard ſide; being paſt that, you come againſt *Black-tail*, to the Southwards of the *Shoebeacon* into the right Deep; the Eaſt Point of *Sheppy* ſhall then lie about South from you. From *Shoebeacon* the courſe is Southweſt to the Point off *black-tail*, there runneth off a Hook, which men might at unawares Sail within, coming from the Northwards in 5 or 6 Fathom; but if you keep from the ſhore in 7 Fathom, you cannot Sail within it. From *black-tail*, to the Beacon upon the *Nore*, the courſe is Weſt South-weſt, leave it on the Larboard ſide as before is ſaid, and run in along the River, in the midſt of the Channel betwixt both Sands unto *Graveſend*.

The Thames for to Sail into the River of London from the North-wards.

For to Sail into the River of *London* coming from the Northwards, you muſt come near the Coaſt to the Northwards of *Ordfornes*, which is to the Northwards of all the Sands, there lyeth *Alebrough*, *Dunwich*, *Walderſwike*, *Sowle* and *Covehit*, all betwixt the *Ordfornes* of *Leyſtaf*. *Covehit* is a ſharp Steeple like as alſo *Leyſtaf*, but *Sowle* and *Walderſwike*, *Alebrough* and *Ordfornes* are all flat Steeples. *Sowle* and *Dunwich* lie both upon the high Land, betwixt them both there is a Valley, therein you may ſee *Walderſwike*, when you are thwart of it. *Dunwich* is the beſt to be known of all theſe foreſaid places: it hath two flat Steeples, and on both ſides ſome Trees. To the Southwards of it lyeth *Alebrough*, which is alſo very eaſie to be known, it hath one flat high Steeple, with three Mills, the two ſtand to the Northwards, and the third to the Southwards of *Alebrough*, when you are thwart of it; but Sailing to the Southwards they come at laſt all three to the Southwards of it. The Land without *Alebrough*, and to the Southwards of it is low flat and kindly Land.

Alebrough.

Betwixt *Alebrough* and *Dunwich* about the midſt betwixt them lyeth a Wood, that is at both ends high, and in the midſt low with a Saddle; this you ſhall commonly ſee firſt as you fall

Dunwich.

with the Land thereabout, and is the best to be known for to know the Coast by. The Land without it, and to the Southwest is very low flat kindly Land. About two Leagues to the Southwards of *Alebrough* lyeth *Ordfornes*, betwixt them both stand also two Woods of Trees, which shew themselves afar off like Castles
Ordfornes. or Towers. *Orufornes* hath a flat Steeple, with a broad Castle, that hath also a thick flat Steeple, almost of fashion like the Steeple of *Karop* betwixt *Amsterdam*, open above with holes in it like as Bell-holes

Before *Dunwich* you may Ankor, there is good lying in 8 or 9 Fathom, somewhat soft ground. Before *Alebrough* is the best Road of all the Coast thereabout in 6 or 7 Fathom.

Alebrough Knock. East from *Alebrough* about two Leagues lyeth *Alebrough Knock*; this is a Sand which at low water is not deeper than seven or eight Foot: you may sound round about it in five Fathom, but it is not good to come nearer it. With Sea winds you may discern it plainly by the breaking of the Sea upon it; but with Landerly or Westerly winds, and fair weather, the Sea breaketh not upon it; he that runneth thereby to the Northwards with an Ebb, shall see it commonly ripple very much upon it, like as upon most of the *English* banks, and not indeed upon the banks, but against them; for upon the shoaldiest or midst of the banks is always the smoothest water, like as you find every where.

Alebrough. When as *Alebrough* is West from you, and the two Steeples of *Ordfornes* are one in the other, there you shall find *Alebrough Knock*. These are sure marks of that Sand.

The *Whiting* or *Whiting-sand*, is somewhat a long small Sand, lying before *Ordfornes* and the kindly Land to the Southwards of *Alebrough*, and lyeth along the Reach, but the South end lyeth further from Land than the North end; there is at low water not above six or seven Foot water upon it. Coming from the Northwards, Men Sail commonly to the Westward of it, that is, through betwixt the Land and *Whiting-sand* towards the *Naes*. Men may also Sail along to the Eastward of it, through
The Court. betwixt *Whiting-sand* and the Eastermost part of the *Court*, or *Court-sand*, which some call the *Rib*.

The

The North end of the *Whiting* lyeth all along cloſe to the ſhore, and lyeth from the Steeple of *Ordfornes* Southeaſt and by South; it is ſo exceeding ſteep and nedle to, that you ſhall have the one caſt 9, the next caſt 5 Fathom, and then you are no more but a Ships length from it, before you can heave the Lead again you ſhould be upon it. When as you tit with the Foreſhip againſt it, it is at the Stern 5 or 6 Fathom deep.

Along the Inner ſide it is alſo every where ſo ſteep, that you cannot ſound it, but on the Outer ſide you may run along by it in 5 Fathom upon the Lead, until you come within the Sands.

When as you come from the Northwards, and will Sail through within the *Whiting*, you muſt run cloſe along by the ſhoar, and Southweſt about by the Point of the Chindle to the Southwards of *Alebrough*, until you come within the North Point of the *Whiting*, when the Steeples of *Ordfornes* come to be Northweſt and by North from you, then you are right thwart of the North Point of the *Whiting*, being within it go again more Southerly, (*viz.*) Southweſt and by South towards *Balſy-Cliff*.

If you ſhould fall to the Southwards of the *Whiting*, or elſe coming from the Southwards, will Sail in there to the Northwards, then bring the Steeples of *Ordfornes* Weſt Northweſt, or Northweſt and by Weſt, but for all not more Northerly then Northweſt from you; and Sail ſo right in until you come by the *Chindle-ſtrand*, then run in along by it, as is before ſaid, and then you ſhall run far enough along to the Northwards of the *Whiting*.

If you will Sail to the Eaſtwards of the Southwards of the *Whiting*, then bring the Steeples of *Ordfornes* North Northweſt, or Northweſt and by North, or Northweſt from you, and Sail in ſo right with them, untill that the Wood or Trees ſtanding upon the next Point to the Southwards of *Balſy-cliff*, come to *Balſy-cliff*, which ſhall then ſtand about Weſt Southweſt from you, keep the foreſaid Wood to the South ſide of the ſaid *cliff*, and Sail in boldly right with it, and then you ſhall run right in the fair way in betwixt the *Whiting*, and the Tail of *Court ſand*; but if you bring the foreſaid Trees more than a Hand-ſpikes length without the *Cliff*, you ſhall not fail to run on againſt the Point

Ordfornes.

For to run into the Eaſtward of the Whiting.

Point of the *Court*. The foresaid Wood of Trees is very easie to be known, thereabouts stand no other Trees.

Or bring the Steeple of *Balsy* West Southwest from you, and Sail in so right with it until you come by *Whiting-sand* in 5 or 6 Fathom, and Lead it in so by it upon the Lead, until you come by *Balsy*, or you get deeper water.

When you come near *Balsy*, whether you be come in from the Northwards or the Southwards of *Whiting-sand*, you must keep somewhat off from the shore, because of a little Riff shooting off from the shore, thwart of *Balsy-cliff*, which you must avoid somewhat with Ships of great draught; there remaineth at low water no more then 2 Fathom, you may commonly perceive it well by the rippling of the Tide.

For to Sail in at a channel through the Court.

You may also Sail into the Southwards of the *Rib*, being the Tail of the *Court* or *Court-sand*, thus: Bring the Steeple of *Balsy* North Northwest, or a little more Northerly from you, and Sail in so right with it, and so you shall run into the Northwards through the *Court*, at a Channel of 8 Fathom depth, the East side of this Channel is steep, come no nearer than 8 Fathom, but by the West side you may run in about by the *Court*, upon the Lead, until you come within the Sands.

Balsy.

Balsy hath a high flat Steeple, and lyeth somewhat within the Land behind the *Cliff*. As you come from the Northwards, you may see *Balsy* to the Northwards or the Westwards of the *Cliff*, but men Sail it altogether behind the *Cliff*, so that at last it cometh out again to the Southwards of it.

For to Sail into Harwich.

If you will Sail to *Harwich* being past *Balsy*, then bring *Balsy* that the steep Point to the Southwards of *Balsy* where Trees stand upon; keep these Marks so standing, and run so along by the shore, until you be over the Point of the *Chindle*, the Marks thereof are 2 high Trees within the Land, as they are about North Northwest from you, so come they one in the other with the Steeple of *Harwich*, and so you are right over the Point of the *Chindle*, and then you shall get deeper water, (*viz.*) 4 or 5 Fathom, or somewhat more against the highest water. Run in then about by the Point, the Channel is lying in right North; but in the midst of the Havens Mouth lyeth a sunken Rocky and Stony ground, which you must avoid; you may

may Sail in about it on both ſides by the Shore or the other, but along by the Eaſt ſhore is the beſt, being within it, you cannot Sail amiſs or take hurt, if you do not Sail bluntly againſt the ſhore; there you may Ankor all over before the Town in 4, 5, 6, or 7 Fathom. You may well alſo go further in the Bight, there it is clean every where. The fair way betwixt *Ordornes*, or *Whiting-ſand*, and the *Naes* lyeth moſt Southweſt and by South, and is 7 Fathom deep, in turning to windwards, you may may run to the ſhoar in 4, 5, 6, 7, and 8 Fathom, but cloſe to the Sands it is deeper, (*viz.*) 8, 9, and 10 Fathom, the nearer the Sands the deeper water.

But for to Sail from *Balſy* to the *Naes*, you muſt mark the Steeple of *Balſy*, when it cometh within a Capſtan-barrs length near to the South end of the *Cliff*, then keep them ſo ſtanding, ſo long until the Houſe upon the *Naes* come over the two Fields lying on againſt the high Land, or come over *Black-head* on the Sea ſide. Sail ſo right in with them, until the Steeple of *Harwich* come to be North Northweſt from you in the little Valley of a red Cliff, leave then the firſt Marks, keep the Steeple of *Harwich* in the little Valley, and go on South Southeaſt until the third Point of the *Naes* come without the other 2 Points, ſo ſhall you run through betwixt the *Naes* and the *Court*, there is at low water no more then 8, 10, or 12 Foot water; it is not good to run through none, unleſs it be a quarter Flood, or with a Ship of great draught at half Flood. The Point of the *Naes* is very ſtony, foul, and uneven, the nearer the ſhore thwart of the Point the ſhoaldier, and the nearer the Sands the deeper. *The Naes.* *Longſand.*

When the third Point of the *Naes* cometh without the two other Points of the other Land, and that again it doth begin to deepen off, (*viz.*) 4 or 5 Fathom, ſo go Southweſt, or Southweſt and by South unto the Buoy upon the *Longſand*. Thwart of the *Naes* is *Longſand* very ſteep, ſo that it cannot well be ſounded with the Lead by them which are not there very well acquainted; but ſomewhat more Southwards you may run along by it in 4 Fathom, and 3 Fathom and ½, until you get the Buoy upon *Longſand* in ſight of you. The North ſhore to the Southwards of the *Naes* is alſo flat; you may run along by it alſo upon the Lead.

The

Buoys upon Longsand *and the* Spits.

The Buoy upon *Longsand* lyeth in 2 Fathom and a half at half Flood; you must leave it on the Larboard side, and the Buoy upon the *Spits* on the Starboard side, which lyeth a little shoaldier, they lie about South and by East, and North and by West a Musquet shot one from the other; the Course between the 2 Buoys is South Southeast, and North Northwest, but you must reckon well your tides, whether you run through there with a Flood, or with an Ebb. Upon the *Spits* betwixt the 2 Buoys it is at half Flood at least 3 Fathom, or almost 4 Fathom, in the right Channel a little to the Southwards of the Buoy upon the *Spits* stand 2 Masts above water of a lost Ship; which are good Marks. Being over the *Spits* the Course to *Witaker's* Beacon is South Southwest.

The Spits.

About half way betwixt them stand also 2 Masts more on the same West side, and over against these Masts lyeth a middle Plate whereupon is a Buoy on the West side: the fair way is along to the Westwards of this middle Plate, through betwixt the Buoy and the Masts.

Middle-plate.

To the Northwards of the Middle Plate goeth out a Channel by the South side of *Longsand*, which you may Sail out and in, and is called the *Kings-deep*. If you come from *Witaker's* Beacon past the Middle Plate, so far as you get sight of the Buoys of *Longsand* or *Spits*, go so boldly East North East, and Northeast and by East in the Sea, or upon the Lead, along by the *Longsand*; but if you should run into the Sea to the Southwards of the Middle Plate, you should with an East Northeast way fall within the Hook of the *Mouse*. This *Kings-deep* is a ready Channel, and used almost by all Ships to run out at.

Kings-Deep.

For to Sail into the Kings-deep.

For to run in at this Channel out of the Sea, then bring the Point of the *Naes* Northwest from you, and Sail in so with it, until you come near the *Gun-fleet* or *Longsand* in 5 Fathom, go in along by it about West Southwest, and Southwest and by West, and keep the sounding of *Longsand*, and so you shall not fail to run in sight of the Buoy upon the *Spits*, and the foresaid Masts to the Southward of it.

Witaker's *Beacon.*

From *Witaker's* Beacon to *Shoe* Beacon the course is South Southwest somewhat Westerly, coming thwart of the *Shoe* Beacon,

Beacon, then is the Eaſt Point of *Sheppy* about South from you. From *Shoe* Beacon the Courſe is along Southweſt to the Point of *Black-tail*, there runneth off a Hook which men might Sail within, coming from the Northwards; but if you keep from the ſhore in 7 Fathom, you cannot take hurt of it, but in 5 you run within it. The like Hook is alſo a little to the Southwards of *Shoe* Beacon, which you might unawares Sail within coming from the Southwards. *Shoebeacon*

From *Black-tail* to the Beacon upon the *Nore*, the courſe is Weſt Southweſt. The *Nore* is a Sand lying from the South Point of the Main Land of the River far to the Eaſtwards, therefore leave the Beacon on the Larboard ſide, and go on Weſt along amidſt the Channel into the River betwixt both the Lands, as here before hath been ſaid in the Deſcription of the *Fiſhers-deep*. *Blacktail.* *The Nore.*

From *Alebrough* along by *Dunwich* to *Covehit*, the Laſt lyeth North and by Eaſt ſomewhat Eaſterly, and South and by Weſt or ſomewhat Weſterly 5 Leagues: but from *Covehit* to *Leyſtaff* North and South 2 Leagues. *Alebrough*, *Dunwich*, and the Sands lie thereabouts.

Betwixt *Dunwich* and *Covehit* lyeth the Haven of *Sowle*, which is a little ſhoaly River, a little within it divideth it ſelf into three parts; upon the Northermoſt arm lyeth *Sowle*, upon the middlemoſt *Walderſwicke*, and upon the Southermoſt *Dunwich*. *Sowle.* *Dunwich.*

Covehit hath a high ſharp Steeple, thwart of it lyeth a Bank not far from Land, which falleth almoſt drie at low water; but at half Flood you may Sail through betwixt it and the Land in 3 Fathom, upon the outer ſide it is very ſteep, ſo that you cannot come nearer it than 9 or 10 Fathom. When the Steeple of *Eaſton* is Weſt Northweſt from you, then you are to the Southwards of the Bank, and when the Steeple of *Covehit* is Southweſt and by Weſt from you, then are you to the Northwards of it. *Covehit.*

Two Leagues to the Northwards of *Covehit* lyeth *Leyſtaff*, and 2 Leagues more to the Northwards of it lyeth *Yarmouth*. The Steeple of *Leyſtaff* is high and ſharp, and is ſtanding a Muſquet ſhot within the Land from the Houſes, ſo that in Sailing *Leyſtaff.*

along you may bring the Steeple on both sides of the Houses. Off from *Leystaff* begin the Bank or *Holmes* of *Yarmouth*, and lyeth along to the Northwards past *Yarmouth*, until thwart of *Winterton*, there go divers Channels through them, which you may Sail through upon divers Marks, for those which are there acquainted, may Sail through within these Banks off from *Leystaff*, until past *Winterton*.

For to come within the Banks of Yarmouth

If you will run through from before *Leystaff* within these Banks, then look out for the Fire-beacons which is standing by *Leystaff*, which are two little white Houses, the one standeth beneath upon the Chindle on the Sea side, and the innermost upon a little Hammock, somewhat further within the Land. When you come from the Southwards, they shew themselves to the Northwards of the Town, but come at last thwart of it. In the Night there is always Fire upon them. For to Sail in there also by Night, bring these Fire-beacons Northwest and by North, or somewhat more Northerly from you, and Sail in so right with them either by Night or by Day; the Church of *Leystaff* cometh then to the Southwards of the Town over a Country-house by the water side when you come against the Channel, there is at low water no more than 3 Fathom, keep these foresaid Fire-beacons one in the other, or bring the innermost rather a little to the Northwards of the outermost, for to avoid a little Plate, which is lying on the South side of the *Deep*, but the Channel is indifferent wide, run until you come against the Strand in 2 Fathom and a half, or 2 Fathom, so near as you will or can, and go up Northwards along by the shore, you shall, being Sailed a little to the Northwards, meet with a Flat, whereupon remaineth at low water less than 2 Fathom, with laden Ships you must Ankor before that Flat, and stay for high water; it floweth there about 8 Foot up and down; so soon as you are over the Flat it will be 6 and 7 Fathom deep. edge then to the shore, and Sail towards it, and then you come before the Brew-house, there is the Road where you may Ankor in 5 or 6 Fathom; from thence Northwards towards toward *Yarmouth* along the shore is all over good Ankoring and good ground.

About

About an Engliſh Mile, or ſomewhat more, to the Southwards of the Town of *Yarmouth* is the Haven of *Yarmouth*, it hath 2 Wooden Heads, where you muſt Sail in betwixt them both againſt the higheſt water when the ſtrongeſt of the Flood is ſpent; at half Flood it is dangerous becauſe of the ſtrong Tide, which ſhould lightly carry you into the *Bight* againſt the ſhore, (againſt your will,) it is alſo beſt to run in along by the Southern Head, there is the deepeſt. At *Yarmouth* in the Road men do commonly Ankor to the Northwards of the Haven right thwart of the Town in 5, 6, 7, or 8 Fathom; the nearer Men Ankor to the Sands the deeper water you ſhall have; all good Sand, and ſoft ground. *Haven of Yarmouth* *Road before Yarmouth.*

If you will Sail into the Road of *Yarmouth* through the *Holmes*, then bring the ſharp little Steeple ſtanding to the Northwards of *Yarmouth* within the Land over the broad Caſtle, or bring the Mill to the North ſide of the Town; keep theſe Marks ſo ſtanding, and go in ſo Weſt North weſt; you ſhall find in the Channel no leſs water than 8 or 9 Fathom at half Flood; the Channel is called *St. Nicholas* Channel, on the North ſide it is deepeſt, being come in, the Road is right before the Town in 5 or 6 Fathom. *S. Nicholas Channel.*

Thwart of over againſt the Haven of *Yarmouth* goeth alſo a Channel through the *Holmes*, for to Sail in through there coming from the Southwards, then bring *Souton* over the North ſide of the Haven, the great Tree betwixt *Northon* and that little flat Houſe or Caſtle, and Sail right in with them, and keep theſe Marks ſo ſtanding, until you be within the *Holmes*, within them lyeth a Plate on the Starboard ſide to the Northwards of the Haven called *Middleground*, you may Sail about it on both ſides, on the inner ſide in 5 Fathom. but towards the *Holmes*, or to the Eaſtward of it in 8 or 9 Fathom.

From *Yarmouth* to *Winterton* the Coaſt is North and by Weſt and Northweſt 2 Leagues. If you will Sail from *Yarmouth* forth through within the Banks to the Northwards, Sail along by the Land, and keep the ſounding of the ſhoar in 5, 6, or 7 Fathom, until you have the 2 Fire-beakons ſtanding to the Northwards of *Caſtor* one in the other, Sail alſo right with them either by Day or by Night, by Night there is Fire upon them; *Winterton.*

you shall so run over a Flat through betwixt 2 Buoys, lying each of them upon a Tail of a Sand; Sail boldly in with the foresaid Fire-beacons, untill you come again near the shore in 5 or 6 Fathom, being by the shore, run again along by it, and keep the sounding thereof as before all along, until you come before *Winterton*.

Thwart of *Winterton* runneth off a dangerous Riff, which is dangerous to Sail by about by Night, if Men do come too near it, which is upon the end so steep, that in 3 Fathom you shall not be a Ships length off from it; but as you come from the Southwards, keep your self in 6 or 7 Fathom, so you cannot Sail too near it. To the Southwards of that Riff upon the Land standeth a Fire-tower, which is very easie to be known, with a Fire-beacon, and also a little white House; when these come one in the other, then you are thwart of the Point of the *Riff*.

To the Northwards of the *Riff* upon the Land stand 2 white Fire-beacons, whereupon there is Fire by Night, for to avoid this *Riff*. As you come thwart of the Point, then are these also one in the other, and so serve these for thwart Marks, and the other to Southwards for long Marks, for those which will Sail about it from the Southwards. Coming from the Northwards along the shore in 5 or 6 Fathom, untill you are by the Fire-beacons upon the North side, you must keep somewhat off from the shore before they come one in the other, else you run against the *Riff*. Being one in the other, they stand Southwest and by West from you, and as the high Fire-beacon to Southwards of *Winterton* cometh to be Southwest, or more Westerly from you, then you are thwart of the Point of the *Riff*; you may not run so far about within the *Riff*, for then you should lightly be fond of the Grounds to the Eastwards of it, especially as you come from the Northwards, for there it is not very wide betwixt them both. From *Winterton* to *Haesbrough*-Point, the
Haesbrough Course is Northwest 3 Leagues. Betwixt *Haesbrough* and *Admirals house* stands a Ruinous Tower upon the Strand, when you keep it and the Steeple of *Haesbrough* one in the other coming from Northwards, so run you upon the Point of the foresaid *Riff*. Four Miles without the Land in *Winterton* Sand, the South end whereof is about East, and the North end North-east of *Winterton*.

Thwart

Thwart of *Admirals houſe* not far off the ſhore is a little Plate where no Ships can go over, but if you go in 6 or 7 Fathom, you cannot Sail too near it, you can alſo run through in 2 Fathom betwixt this Plate and the Land.

From *Haesbrough* to *Cromer* the Coaſt is along Northweſt and by Weſt, and Weſt Northweſt 3 or 4 Leagues. The Land lyeth from *Cromer* to *Bornum* firſt Weſt Northweſt, and Weſt and by North, and then Weſt, and Weſt and by South 9 or 10 Leagues.

From *Cromer* to *Blakeney* it is 3 Leagues. At *Blakeney* ſtandeth a high Steeple, which you may ſee along far over the Land, when it cometh to the little Steeple, ſo have you the firſt Buoy of the Channel, lying at the South end of the Pole, being a Sand at the Weſt ſide of the Channel of *Blakeney*, go from the firſt Buoy to the other, and along by them, until you come within the Haven. This is a Tide-Haven, where Men lie dry at low water. Four Leagues to the Weſtwards of *Blakeney* lyeth *Wells*, betwixt them both lyeth the foreſaid Shoald, called the *Poll* and *Piper*, there it is a Shoald far off at Sea. By the Weſt end of this Shoald goeth in the Deep of *Wells*, the Beacons which you muſt Sail in along by, ſtand all along by the *Piper*. When *Hobrom* ſtands Eaſt Southeaſt from you, then you are to the Weſtwards of the *Piper*; thwart of it is good Road in 6 Fathom. *Wells* is then Southeaſt from you, and the Trees ſtand then alſo againſt the Steeple, then you may Sail open into the Haven of *Wells* along by the foreſaid Beacons. *Blakeney.* *Poll and Piper.* *Wells.*

Betwixt *Wells* & *Bornum* is a Bank, you may ride under it in 5 or 6 Fathom at half flood there is upon it no more than 2 fathom. *Bornum.*

He that will Sail into *Bornum*, muſt go in at high water, and bring the Steeple againſt the *Black houſe*, and Sail in ſo by the Beacons, and leave them on the Larboard ſide; theſe are all Tide-Havens.

From *Bornum* to *Chappel* the Courſe is Weſt South Weſt two Leagues, to the Northwards of it lyeth the *Sonk*, which is a Sand falling dry at low Tide. You may Sail about it on both ſides of the *Sonk* unto *Lin*. *Chappel.*

For to Sail in the Eaſtern Channel of *Lin*, Sail about to the Eaſtwards of the *Soak*, bringing the Wood of Trees over the Point *Eaſtern channel of* Lin.

Point of *Sitsein* or *Snidson* Chappel East from you; go so in Southeast and by South, and then you shall find the first Buoy, then South and by West, and South Southwest untill you come about the Point, there the Buoys and Beacons shall shew you the way.

Coming about the Point, then you run through the Sands in the Northern Channel, and Sail out again by the same in the Sea, by the Buoys and Marks being thereof. This Northern Channel lyeth in the Sea Northeast and Northeast and by East, and is very well Buoy'd and Beacon'd.

You may also Sail into the Westwards of the *Sonk*, (*viz.*) South and by East in along by it, and run to the first Buoy, and then from the Buoy along by the Beacons unto *Lin*. Coming from the Eastwards, Men may well run through within *Sonk*, along by the Land, close along by the Chappel, and in South and West unto the foresaid first Buoy before the Town.

Bostons-Deep. For to Sail from *Cromer* or *Blakeney* to *Bostons Deep*, you must go on West and by North, untill you come by the Land betwixt *Hommer* and *Lagerness*. From *Sonk* lyeth a long Bank *The Flats.* called the *Flats*, North in the Sea a League, which at low water falleth dry at divers places. You run with a foresaid West and by North Course (being by *Cromer* or *Blakeney* a little without the Land) along without, or to the Northwards of this Bank, at high water you may well go over it, the Ground on the East side goeth up flat and plain, run boldly to it without fear, untill you come in 4 or 3 Fathom water, he which useth his Lead can take no hurt of it, but on the inner side, that is, on the West side it is very steep, so soon as you be over the shoaldiest, you shall get suddainly deeper water, and good Sand Ground, under it, or within it, it is good riding for Easterly winds.

For to Sail into Bost-ons-Deep *Elleknock.* For to Sail in *Bostons Deep* through within the *Knock* or *Elleknock*, you must keep the Sounding of the shore in 5 Fathom, so long untill the Point of *Lagerness* be West Northwest from you. Betwixt the shore and *Elleknock* remaineth at low water 5 Fathom in the midst of the Channel, but *Elleknock* falleth dry at low water. When *Lagerness* is West Northwest from you, so go on Southeast through betwixt *Elleknock* and the

the ſhoald, ſhooting off from the ſhore to the Weſtwards of *Lagerneſs*, untill you get again the depth of 6 or 7 Fathom, in this going over remaineth by low water no more than 2 Fathom, but it floweth there 3 Fathom up and down. Being over it, go on Southweſt along betwixt *Longſand* and the ſhoald, lying off from the ſhore, there it is deep betwixt them both 9 or 10 Fathom; you muſt ſound both ſides in 5 Fathom, but the Flat is ſomewhat deeper then *Longſand*. *Longſand.*

For to Sail without *Elleknock* into *Boſtons deep*, coming as aforeſaid to the Weſt Land, you muſt look out for the 2 Steeples of *Ingolmills*, ſtanding to the Northwards of *Lagerneſs*, bring them one in the other, and then they ſhall ſtand North Northweſt from you, keep them one in the other, and go on South Southeaſt untill the Trees upon the Point by Weſt of *Lagerneſs*, come without the Point of *Lagerneſs*, and then you run through betwixt *Elleknock* and *Dogſhead*, that is a Shoald without *Elleknock*, when the aforeſaid Trees come a Hand-ſpikes length paſt, or to the Eaſt of the Point of *Lagerneſs*, then go on Southweſt, and then you run right in the Deep, betwixt *Elleknock* and *Longſand*, and ſo you ſhall find betwixt *Elleknock*, and the Point of *Longſand* 5 Fathom depth, being paſt *Elleknock* it will be 8, 9, and 10 Fathom deep. *Ingoldmills* *Dogſhead.*

If you will Sail out of the Sea into *Boſtons deep*, and not along by the Land as is aforeſaid, bring the foreſaid Trees a Hand-ſpikes length without the Point of *Lagerneſs* ſtanding from you about Weſt Southweſt, Sail ſo right in with them, untill that the High Land within *Lagerneſs*, or *Winſleet* begin to come even with the Point of *Lagerneſs*, being ſo from you more Northerly as Weſt, then you are within the Point of *Longſand*. Or elſe there ſtand 3 little Houſes on ye Sea ſide, about half way betwixt *Lagerneſs* and *Ingoldmills*, then they come Northweſt from you, and the foreſaid Trees without the Point, ſo are you alſo within the Point of *Longſand*, and go in Southweſt betwixt *Elleknock* and *Longſand*. A little paſt *Lagerneſs* is lying a Shoald in the midſt of the fair way, but neareſt *Longſand*; when the Trees upon the Point to the Southwards of *Winſleet* come in the ſecond Valley of the High Land within *Winſleet*, then are you right thwart of this Shoald, edge there- *Boſtons deep.*

fore

fore to one side or other, rather towards the Shoald, there is wideſt, keep boldly the ſounding of the Shoald and run South-weſt along by it, until the Steeple of *Boſton* come over the Steeple of *Butterwike*, that is alſo a flat Steeple, but ſmaller than that of *Boſton*, and ſtanding in a Wood of Trees, thwart of it runneth the Shoald off with a Point; being paſt, go on Weſt Southweſt all along by the foreſaid Shoald, until the great Steeple of *Boſton* come over the ſecond Mill; there is good Ankoring by the Weſt ſhore in 5 Fathom at low water. He that cometh there at low Tide, muſt Ankor for the Tide until half Flood, before it you cannot Sail further in from thence, and then you find not alſo more than 2 Fathom upon the ſhoaldieſt.

Butterwike.

From thence the Deep lyeth in along by the Beacons, about South to the third Beacon, being paſt them Weſt Southweſt, and then by little and little more Weſterly and Northerly, but run all along by the Beacons, leaving them on the Starboard ſide, at laſt on North into the River.

Upon the Point of the River ſtandeth a Houſe, being a Sheep-Houſe before that you come by it, it ſheweth as if there were no opening, by reaſon it is all even Green Land, run ſo by it all along by the Land; being paſt it, the River doth open it ſelf. Being come within the Points, you muſt run in betwixt 2 Dikes, a League up until you come before the Town; in the River it is at half Flood every where deep enough. When you come a little within the Houſes of the Town on the Larboard ſide, you muſt let fall the Ankor, and ſtay till the water begin to fall, ſo you have Flood enough for to drive to the Key, there you may faſten with one Cable; it doth not begin to ebb there before the water be fallen 3 Foot.

Boſtons-deep.

An Eaſt and Weſt Moon maketh in *Boſton-deep* the higheſt water, before the Town an Eaſt and by South, and Eaſt Southeaſt Moon. Coming from *Boſton*, and Sailing out at the Deep with a high water, you muſt look out for the foreſaid high Land within *Lagerneſs*, as it cometh behind the Point of *Lagerneſs*, ſo ſet boldly the Courſe, where you will be either to the Eaſtwards or Northwards, without fear.

Lagerneſs.

From *Lagerneſs* to the *Hommer* it is about 7 Leagues moſt North; betwixt them both about a League to the South-

wards

wards from the *Hommer* is *Saltfleet-haven*, a little to the North- ward of a ſharp Steeple call'd *Wilgrip*. Thwart of *Saltfleed-haven* an Engliſh Mile from the ſhore is a Sand-plate, not very great, falling at low water almoſt dry; run about without it, and leave it lying towards the Land from you, but yet for need you may alſo Sail through within it. *Plate by* Saltfleed-*Haven.*

For to Sail in the *Hommer* coming from Northwards, Sail along by the ſhore, and run about by the North Point; coming by the Point, keep ſomewhat off from the ſhore in 4 or 5 Fathom, for to avoid a little Tail lying off the Point, being about it, run to the little Iſland which lyeth a little by Weſt that foreſaid North Point. *For to Sail in the* Hommer.

If coming from the Southwards, you will Sail to the *Hommer*, then bring the *Pawl-ſteeple* (being a high and ſharp Steeple on the North ſide of the *Hommer*) a little by South the North Point of the *Hommer*, or over the foreſaid little Iſland, and Sail ſo right in with it, until you come by the little Iſland; being come by it, leave it on Starboard ſide, and run in cloſe by it, for to avoid a great Sand called the *Bull*, which lyeth off from the ſhore almoſt into that Iſland. Coming within the Iſland, bring the 2 Beacons ſtanding upon the Iſland, the one in the other, and ſo Sail on to the Weſtwards to *Grimsby*, leaving the Buoy upon the *Bull*, lying on the Starboard ſide, and run on ſo North by it, you may not come nearer the *Bull* then 6 Fathom, in this fair way it is 8 Fathom deep. You may Ankor before *Grimsby* in 4 Fathom at low water, and within the foreſaid Iſland by the North Point of the *Hommer* in 3 Fathom; there lyeth commonly Ships tarrying for the Winds, it floweth there at leaſt 3 Fathom up and down; a Weſt Southweſt, and Eaſt Northeaſt Moon makes before the *Hommer* higheſt water. *Road before* Grimsby.

From *Grimsby* in along to *Hull*, the Courſe is Weſt Northweſt to the end of the Bank, or *Ballaſt plat*, leave them on the North ſide; on the South ſide is a little Plate, having a Beacon, leave it on the Larboard, and run along to the North of it; being paſt it, run along by the ſhore in 3 Fathom, the fair way there is 4, 5, and 6 Fathom, and thwart of this foreſaid Beacon 9 Fathom, coming to the end of the Bank, edge up to the Weſtwards about by the Point on the South ſide; but there *Grimsby.*

runneth off a Flat which you must avoid, being about this Point, you shall see the Town of *Hull* lying before you, Ankor there before it in 6, 7, and 8 Fathom; an East and West Moon maketh full Sea before *Hull*, for to Ankor by the Ballast-plate, bring the flat Steeple standing to the North of *Hull*, to the high Point of *Pawl*, until you come by the Plate, there it is best to Anker upon it.

Flambrogh Head. From the North Point of *Hommer*, called *Spurn-head*, to *Flambrough-head*, the Course is North and by West 9 Leagues, betwixt them it is shoald water of 6, 7, 8 Fathom deep. *Flambrough-head* hath many Chalk Hills, especially on the North side towards *Fily*; *Flambrough* hath a Head or Pear a League to the Westwards of it. On the South side is a Town called *Bridlington* *Bridlington*, having also a Pier; you may Ankor there in the Bay in 6 Fathom.

Fily. Three Leagues by the West of *Flambrough-head* lyeth *Fily* in a round Bay, by South of a Point lying out, and having a Pier, there you may lie within it; but it falleth dry at low water.

Fily-bridge Without the Head of *Fily*, is a Rock under water call'd *Fily-Bridge*, betwixt it and the Pier; you may well lie a float with a Ship of an Hundred Last in 5 Fathom at low water, and have shelter for a Northeast and East wind.

Scarbrough From the Point of *Fily* to *Scarbrough*, it is Northwest 2 Leagues; *Scarbrough* hath 2 Pears; you may run within them at high water, from the Southwards at low water it is drie.

Robin Hoods Bay. From *Scarbrough* the Coast lyeth along by *Robin Hoods-bay*, until before *Whitby* most Northwest; but past *Whitby* the Land runneth in West Northwest, and by little and little more Westerly to *Teas*.

Robin Hoods-bay is a good Road for a South Southwest and West wind; you may lie there in 7 or 8 Fathom.

Whitby. *Whitby* is a Tide-Haven falling dry at low water; the East side of the Haven runneth off a Rif of Rocks which you must avoid, for to Sail in, run betwixt the 2 Beacons, until you come in betwixt 2 Lands, and Ankor there.

Humly Foot. From *Whitby* to the *Teas*, the Coast is most West Northwest, and

and Weſt and by North 7 Leagues; betwixt both lyeth *Huntly-Foot*, and *Bedcliff*; *Huntly-Foot* is a high Hill lying on the Sea ſide, 4 Leagues to the Eaſtwards of the *Teas*, *Bedcliff* is half way betwixt *Huntly-Foot* and the *Teas*; it is a Cliff of ſuch very red Earth, that when as the Sun ſhineth againſt it, it is like red Cloath: theſe two are good Marks for to know the Coaſt by. *Bed-cliff.*

Cloſe by the Southwards of the Mouth of the *Teas* lyeth 3 Biffs, lying a half League Eaſt Northeaſt in the Sea, and are foul and Stony falling dry at low water, upon the North ſide they are flat, ſo that you may ſound about them in 5, 6, and 7 Fathom; but on the South ſide are ſo ſteep, that coming near them, and ſounding in 13 and 14 Fathom, you ſhould be upon them, before you ſhould be able to heave the ſecond time.

A League and a half to the Northwards of the *Teas* is *Hartle-pool* upon a Point lying out as an Iſland; for to go in there, you muſt run into a Bight by South of the Town within a Head, until you come againſt the Town; there you ſhall be dry at low water. *Hartle-pool*

About half ways betwixt *Hartle-pool* and the *Teas*, runneth off alſo a Riff of Rocks thwart from the ſhore a good ways into the Sea; come no nearer it than 5 or 6 Fathom, there ſtandeth a Mill to the Northwards of the Town of *Hartle-pool*, keeping that by Weſt of *Hartle-pool*, obſerve the Marks following a good way to the Northwards, then you cannot Sail upon the foreſaid Riff; but if you bring the foreſaid Mill a little by Weſt from the Town, ſo that you can ſee through them betwixt the Mill and the Town, ſo you ſhall not Sail upon the Riff.

For to Sail from the Northwards into the *Teas*, by the Northwards of *Hartle-pool*; a little Southwards of *Sunderland* up the high Land, a little within the Land lie 2 Hammocks cloſe one to the other, eaſie to be known, like Womens Breaſts, called the *Paps*, keep theſe 2 Hammocks within the Point of *Hartle-pool*, ſtanding then from you Northweſt and by North, Sail ſo on to the Southwards, and you ſhall fall before the *Teas*, and ſhall not come too near the ſame, that lyeth out before the mouth of the *Teas*, and lies off about half a League into the midſt of the Sea. *For to Sail into the Teas.* *The Paps.*

On both sides, as well on the North side, as the South side of the *Teas*, stands 2 little Houses, white Houses for Fire-beacons; if you come from the Northwards, and get sight of them, then bring the 2 Southermost ones one in the other, which shall then stand South and by East from you, Sail right in with them, untill the other 2 standing on the North side of the *Teas*, come also one in the other, then leave them on the South side, and Sail in right with them that stand on the North side, and so you shall run in amidst the Channel; there is upon the Barr or shoaldiest at low water no more than 5 Foot, but it floweth there with a common Tide at least 2 Fathom up and down.

The Teas. A Southwest Moon maketh there full Sea; if when you come from the Southwards, and will run into the *Teas*, then bring the innermost of the 2 Fire-beacons standing on the North side, at least a Hand-spikes length, or the length of a Capston-barr to the Northwards of the other, and run so Westwards towards them, until the 2 Fire-beacons on the East side are one in the other, and Sail so right in with them, as hath been said, until that the two foresaid Fire-beacons on the North side come one in the other; when you have them one in the other, run in right within them, until you are come by the North shore, and then close along by it, coming also at the desired place, you can Ankor as you please.

When you come so far in past the first Fire-beacon, (*viz.*) that you can see *Hartle-pool* betwixt the 2 Fire-beacons, there you may Ankor in 3, 4, or 5 Fathom; or when *Hartle-pool* cometh betwixt the foresaid Fire-beacons, then go South Southwest until you come by the South shore; there it is also good Ankoring. Further it is Pilots water unto *Stokton*, for there within the Deeps do shift oftentimes, and that in short time, 3, 4, or 5 times in a Summer.

For to Sail into the new channel. He that will Sail in there with Northerly Winds, and a Flood, must reckon well the Tides, for the Flood falleth strong to the Southwards over the Grounds, and should be there lightly carryed behind the Bank to the Southwards of the Buoy, lying upon the Point of the Bank.

Besides the foresaid Channel, runneth yet another Channel through the Grounds, lying off from the North Point of the

Teas.

Teas. For to Sail in, you muſt take mark of the 2 high Lands within the Land to the Southwards of the *Teas*, bring them within a Hand-ſpikes length one to the other, or bring the *Paps* to the Weſt ſide of *Hartle-pool*, ſo ſhall the foreſaid 2 high Lands come within a Hand-ſpikes length near one to the other, Sail in right with them, and you ſhall run right into the new Channel, along through that foreſaid Sand, and come againſt the Buoy (upon the Sands on the South ſide of the Deep) again in the right fair way. As you get again deeper water; or have the 2 Fire-beacons on the North ſide one in the other, then go in towards them 7 Leagues by North. The *Teas* is the River of *Sunderland*, a little the Northwards are the *Paps*, and are good Marks, as hath been beforeſaid. The *Paps* being South Southweſt from you, about an Engliſh Mile from the Land, then are you right before the River of *Sunderland*, the Ground is there indifferent clean, but ſomewhat Stony; there you may Ankor in 4, 5, or 6 Fathom; on both ſides of the River it is ſtonie. On the North Point of the River is a Beacon in the water, run there in within a little Ships length along by it; being paſt that, you ſhall get deeper water, (*viz.*) 1 Fathom and ½, and 2 Fathom at low water; but upon the Bar is no more than 3 Foot, with a common Spring and high water, there is 2 Fathom and a half, or a little more.

After this aforeſaid Depth of a Fathom and ½, or 2 Fathom, you meet with a ſtonie Floor 2 Ships length broad, upon it, it is at high Tide 12 Foot deep, according as the Tide ſhall run being over. A little paſt, there is a narrow place, where a long Ship ſhall ſcarce be able to ſwim within it, it is wide enough, and good Ankor-ground every where.

From the *Teas* to *Tinmouth*, the Courſe is North Northweſt 8 or 9 Leagues. Two Leagues to the Southwards of *Tinmouth* is the Point of *Sunderland*, but cloſe to the Southwards of *Tinmouth* goeth in the River of *Newcaſtle*. From the Point of *Tinmouth* ſhooteth off a ledge of Rocks, you muſt Sail in by it, leaving it on the Starboard ſide. The marks to Sail into this River, are 2 Fire-beacons ſtanding upon the North ſhore, bring them one in the other, or the innermoſt, that is the higheſt a little to the Northwards of the outermoſt or longeſt; Sail ſo right in along

The River of Newcaſtle.

along by the foresaid ledge of Rocks on the North side, so you shall have upon the shoaldiest 2 Fathom at half Flood. A Southwest Moon maketh there full Sea. The South shore is flat, you may lead it in with a Sounding-poll for Ships going not deep, in 10 Foot at half Flood. Coming within, run along by the North shore until past the little Town *Sheals*, edge then over to the other shore, until you come through the crooked Reach, the River is there up again a little to the Northwards, and then to the Southwards to *Hawks-bill*, and about by it to the Town of *Newcastle*.

Seven or eight Leagues by North *Tinmouth* is *Cock-Island*; betwixt them both half ways lyeth the River *Bly*, where the *French-men* do much Sail to fetch Coal. From the North Point of this River runneth off a ledge of Rocks a great shot of a cast Piece Southeast into the Sea, but the South side, and the Coast by South of it is very clean and Sand Strand. Upon the South Point of it are 2 Beacons. If you will Sail in there, bring the one in the other, and Sail in right with them, then you can take no hurt of the aforesaid Riff of the North Point. Coming by the outermost of them, you shall see then another smaller Beacon by it, standing upon a little edge of Rocks shooting off the South Point, leave it on the Larboard side, and run in along close about Northwards of it. The ledge of Rocks on the North side, remaineth at high water a good ways from the Land, also at a Spring-Tide above water; within it is a Bight, for a North or Northeast wind it is good lying there; at low water there is 2 Fathom deep. In the mouth of the River it is with an ordinary Tide, and high water 2 Fathom; and it floweth there 2 Fathom up and down, so that at low water it falleth almost drie.

Cock-Island. The *Cock-Island* is a little Island, and not high; it is half a League from Land, you may come to Ankor in it for East, and South, and Southeast winds, but the wind coming Northwards of the East, it maketh there a bad Road, for you must lie betwixt the Island and the Main-Land, where you have no shelter for a North-wind. On the South side of the Island the Ground is foul, and a little to the Southwards of the Island runneth off a foul ledge of Rocks from the shore, until thwart or past the Island.

Iſland. Coming from the Southwards, keep the Caſtle of *Bambrough* without the Iſland, or elſe you ſhoud Sail upon the Point of that Ledge aforeſaid.

Betwixt that Ledge and the Iſland it is ſo narrow, that a Man ſtanding at low water Mark upon the Rocks of this ledge, ſhould almoſt be able to caſt with a Stone unto the Iſland. For to Sail in three, take heed unto theſe Marks hereafter deſcribed: there ſtandeth a Houſe upon the Sea ſide, being a Salt Kettle, and alſo a Caſtle ſomewhat further in within the Land, ſhewing themſelves high enough, bring them one in the other, and then they ſtand ſomewhat more Northerly than Weſt from you, and run ſo right in with them, ſo ſhall you run in right amidſt the Channel betwixt both; being come in, edge up behind the Iſland, and Anker there in 5 or 6 Fathom. About this Iſland there run alſo divers little Rivers into the Land, but they fall moſt dry at low water.

From the *Cock-Iſland* to the *Staples*, the Courſe is North Northweſt, and North and by Weſt, 8 or 9 Leagues; the *Staples* are high Iſlands and Rocks right to the Eaſtwards of *Bambrough*, lying at leaſt 3 Leagues from the Land Northeaſt into the Sea; a little to the Northward of them is the *Holy-Iſland*. By South or Weſt of the *Holy-Iſland* is a Bay where you may lie Land-lock'd almoſt for all winds; againſt the Caſtle is the beſt Road; you may alſo run in from the Southwards, through betwixt the *Staples* and the Main-land. Betwixt the *Staples* and the *Holy-Iſland* lyeth two ſunken Rocks, coming at low water very near, even with the water, the Weſtermoſt towards the *Holy-Iſland*, is called the *Gouldenſtone*, the Eaſtermoſt by the *Staples* is called the *Plough*. For to avoid them, Sailing through betwixt the *Staples* and the *Holy-Iſland*, whether you come from the Southwards or the Northwards, bring the Steeple of *Tenſtenbrough* over the Caſtle of *Bambrough*, and keep them ſo ſtanding, and run betwixt them both; this Channel lyeth ſo through Northeaſt and Southweſt. From the outermoſt end of the *Staples* to St. *Abbens-head*, the Courſe is Northweſt 8 or 9 Leagues. *The Staples* *Holy-Iſland.*

From *Holy-Iſland* to St. *Abbens-head* it is North Northweſt 7 or 8 Miles. To the Northwards of St. *Abbens-head* Men do run in unto *Leeth* and *Edenbrough* in *Scotland*. St.

S. Abbens-*Head.* St. *Abbens head* and the Island *Bas* lie East and West four Leagues asunder. The Island *May* and St. *Abbens-head* North-west and Southeast 4 great Leagues. *May* and *Bas* lie one from the other Southwest and by West, and Northeast and by East 3 Leagues and ½. *Bas* is a high round Rock, clean round about, which you may Sail along by on both sides. Betwixt the Rock and the South shore it is 10 or 12 Fathom deep, but the common fair way is to the Northwards of it. Between St. *Abbens-head* and *Bas*, it is most a clean Coast, but without Ankor Ground. The Island *May* is greater than the *Bas*, and also clean Ground about, except on the East side, there it is foul.

Island May.

From St. *Abbens-head* along to the Northwest of *Bas*, the Course is West and by North, and West Northwest 4 Leagues, and from *Bas* to the Islands *Inchkieth* West, and West and by North 5 Leagues. Between *Bas* and *Inchkieth* by the South shore lyeth many Rocks, little Island, and foul Grounds, where at divers places it is good, but not to be used but by them that are well acquainted. *Inchkieth* and *May* lie Southwest and by West, and Northeast and by East 7 great Leagues asunder. On the North Coast of *Inchkieth* is an out-Point called *Kingorness*, before it, and about it lie some little Rocks under water; a little by Eastward of the Eastwards of the Point is Ankor-ground, and good Road for Westerly winds. Betwixt the Point and the Island *May* or the Point of *Fishnes* on the North shore lyeth divers little Havens, whereof some of them do also yield out Coals, but are little used by the *Hollanders*. On both sides of *Inchkieth* it is good for East and West winds.

Inchkieth.

Kingorness

From *Inchkieth* to *Leeth* it is Southeast a League. Before *Leeth* about an half English Mile from the shore lyeth a Rock, upon which standeth a Mast, with a Cross or some other thing of Wood upon the top of it for a Beacon. At high water the Sea floweth over it, and at low water you go on foot to it. From the East side of that Rock lyeth off a Riff almost unto *Inchkieth*. You may also run through to the Southwards of *Inchkieth* betwixt the aforesaid Riff, and the South shore, but it is not very well to be done, but by them which are here exceeding well acquainted. It is altogether there full of Rocks

Leeth.

and

and foul Grounds. When as you Sail in to the Northwards of *Inchkieth*, you muſt leave the foreſaid Maſt on the Larboard ſide, and run about to the Northwards of it, and then alſo towards the South ſhore, and Ankor about half an Engliſh League to the Weſtwards from *Leeth*, and alſo half an Engliſh League from the ſhore in 6, 7, or 8 Fathom deep. *Leeth* the Haven of *Edenbrough*, a Tide-Haven, which falleth dry at low water.

Of the Depths and Grounds about theſe places.

FIve Leagues North and by Eaſt, and North Northeaſt from the North *Foreland*, or from *Margate* is a Bank called *Kentiſh-Knock*, upon it is 3 Fathom water. Being by it you may even ſee the Land from below.

Five Leagues Northeaſt from theſe Banks it is 20 Fathom deep.

Northeaſt and by North from the North *Foreland* 9 or 10 Leagues, and about Eaſt from the *Naze* 8 Leagues into the Sea, lyeth a Bank called *Galloper*, of five or ſix Fathom depth.

The *Weſt-rocks* is a ſtonie Ground lying between the *Conre* and *Long-ſand*, whereupon is no more than 2 Fathom water at half Flood.

Without the Sand of *Harwich* 5 Leagues from the *Naes*, it is Twenty Fathom deep: being there, you may ſee the Lnd.

Thwart of *Ordfornes* you may ſee the Land from below, in 22 Fathom. Five or 6 Leagues without *Leyſtaff* and *Yarmouth* Southeaſt and Eaſt into the Sea, it is 27 and 28 Fathom deep; there you can ſee the Land.

Four Leagues Eaſt and by South from Land, without the *Holmes* of *Yarmouth*, lyeth a Bank, called *New-ſand*, and is not deeper than 2 Fathom.

East Northeast at least 7 Leagues from Land thwart *Yarmouth* it is 15 Fathom, the Ground red gross Sand with little round Stones, being there, you may even see the Land from below.

Thwart of *Winterton* and *Cromer* 8 Leagues from the Land, it is 8 Fathom deep, and there you can see the Land.

Winterton Sand lyeth 4 Leagues from Land Northeast from *Winterton.*

Northeast, and Northeast and by North from *Cromer* lyeth a Bank, whereupon remaineth at half Flood no more than 4 Fathom, from thence you may see the Land indifferent well.

North and by East from *Blackney* is a Bank, whereupon is at half Flood no more than 5 Fathom, in 18 Fathom, or thereabouts, you can see the Land. From thence to the Point of *Chappel* it is all shoals. About West Northwest, and North and by West from *Winterton-sand* lyeth the Bank before *Cromer* 5 Leagues without the Coast. To the Northwards of *Hommer* of *Hull*, you see the Land in 25 Fathom. *Flambrough-head* men may see in 35 Fathom, and *Scarbrough* from below, you may see in 45 Fathom.

The Tides and Streams of these places.

AT the North *Foreland* a North and South Moon maketh there high water. Within the *Thames* a South and by East Moon.

Before the *Thames* at *Harwich* and *Orfordnes*, a South South-east Moon.

At *Leystaff* and *Yarmouth* a South Southeast Moon; and without the Banks of *Yarmouth*, and before *Cromer* a Southeast Moon maketh full Sea.

Betwixt the Banks of *Harwich* and the *Holmes* of *Yarmouth* the Flood falleth South, and the Ebb North. Thwart of the Banks of *Winterton* and *Cromer*, the Flood falleth South South-east, and the Ebb North Northwest. Before

Before *Cromer* a Southeaſt Moon maketh high water. At *Blackney*, *Wells*, *Bornum* and *Lin*, an Eaſt and Weſt Moon. Before the *Humber* of *Hull* an Eaſt Northeaſt and Weſt Southweſt Moon.

From *Blackney* to *Flambrough-head*, the Flood falleth Southeaſt, and the Ebbe Northweſt. At *Flambrough* and *Filey* in the Pier a Weſt Southweſt Moon maketh full Sea.

At *Scarbrough* and *Robin-hoods*-Bay, a Southweſt and Northeaſt Moon.

In the *Teas* and at *Hartle-pool* alſo a Southweſt and Northeaſt Moon. Before the River of *Newcaſtle*, a Southweſt and Northeaſt Moon maketh high water.

Thwart of *Flambrough-head*, *Scarbrough*, the *Teas*, and alſo thwart of the River of *Newcaſtle*, the Flood falleth Southeaſt, and the Ebb Northweſt.

To the Northwards of the *Teas*, the Flood falleth South Southeaſt along the Land. From the *Teas* to *Scarbrough* Southeaſt and by Eaſt.

On theſe Coaſts between *Tinmouth* and St. *Abbens*-Head, a Southweſt and Northeaſt Moon maketh high water.

At *Leeth* in the Haven a Southweſt and by Weſt Moon maketh full Sea.

The Flood falleth along theſe Coaſts South Southeaſt, and the Ebb North Northweſt.

North *Foreland* lyeth 51 *deg.* 28 *min.*
Orfordnes lyeth 52 *deg.* 20 *min.*
Yarmouth lyeth 52 *deg.* 45 *min.*
The ſide of *Homber* and *Hull* 53 *deg.* 45 *min.*
Flambrough-head 54 *deg.* 8 *min.*
Scarbrough 54 *deg.* 20 *min.*
Tin-Bay, or the River of *Newcaſtle* 54 *deg.* 58. *min.*
Barwick 55 *deg.* 49 *min.*
Leith 56 *deg.* 3 *min.*

For to know the Courſes and Diſtances from place to place. See the Pilots Sea-Mirrour, *In* pag. 19, 20, 21.

How theſe Lands do ſhew themſelves at Sea.

Flambrough-head. *Fyley.* *Scarbrough.* *Robbinhoods-Bay.*

Whitby *Huntley-foot.* *Redcliff.*

Thus ſhews the Land betwixt the Tees *and* Flambrough-head *when you Sail along by it.*

Huntley-foot. *Redcliff.* *Tees.* *Hartlepool.*

Eſington. *Schell.* *Sonderland.*

Thus ſheweth the Land betwixt Tinmouth *and the Hills of* Huntley-foot *and* Redcliff, *to the Southwards of the* Tees, *when you Sail along by it.*

Tinmouth.

Cocket.

Thus ſhews the Land between Tinmouth *and* Cocket Iſland.

II. Demonstration,

In which,

The East side of Scotland *is shewed, from the Island* Cocket *to* Orcaneſs.

FRom *Lieth* to *Queens-ferry* there lie on both ſides many Rocks, ſome above, and ſome under water. In the narrow before *Queens-ferry* lyeth a little Iſland called *Inchgarve*, which you muſt run along to the Northwards of; on the South ſide it is with a Stone Bank, (where Men may go over at low water) faſt to the main Land, along to the Northwards of it, it is clean and deep. Within that little Iſland lie *Caryn*, and other places more, where Men do load Coals. *Queens-Ferry.*

Under the Eaſt ſide of the Point to the Northwards of *Queens-ferry* is a good Road in 2, 3, or 4 Fathom, according as you lie far from the Shore.

A League North from the Iſland *May* lyeth the Point *Fifsnes*, lying from St. *Abbens-head* Northweſt and by North 4 great Leagues. From thence to *Dondee* is a good Haven which goeth in betwixt two high Lands, being within, Men do Ankor before the Town. Farther in upon the River lyeth another Town called St. *Johns*, which you may go up to at high water. *Fifsnes.* *Dondee.* *S. Johns.*

Between the Point of *Fifsnes* and *Dondee* lyeth alſo the Bay of St. *Andrews*, there is alſo good Ankor ground. Four great Leagues North and by Eaſt from the Point of *Fifsnes*, and Northeaſt from St. *Andrews* lyeth a great Rock called *Inchkap*, which the Sea floweth over at high water, and at low water it falleth ſo dry, that the Fiſher-men go upon it. *S. Andrews* *Inchkap.*

Seven

Monroſs. Seven Leagues to the Northwards of *Dondee* lyeth *Monroſs*, a good Haven. Firſt, you muſt Sail in there amidſt the Channel, and edge up to the Northwards, and Ankor before the Town.

Over againſt *Monroſs* lie three *Hommocks* which ſhoot out from the other Land; bring the middlemoſt and the Houſes upon the Strand together, then ſhall you find the middle of the fair way; on both ſides of the Havens Mouth lyeth a blind Cliff.

Red-head. Betwixt *Dondee* and *Monroſs* lyeth an out-Point called *Red-head*, about a great League to the Southwards of *Monroſs*. There ſtandeth a high Tower upon the Land called *Abrot*.

Stone-Bay From *Monroſs* to *Stone-Bay* or *de Torre*, the Courſe is North-eaſt and by North 4 Leagues. This is a deep Bay, and a good Haven for thoſe that are bound to the Southwards, where Men may lie Land-lockt with many Ships.

Aberdeen. Three Leagues to the Northwards of it lyeth *Aberdeen*: In this Havens Mouth it is 3 Fathom deep, The Weſt Point is ſomewhat foul, therefore you muſt run in by the Eaſt Land, until you come within the Haven, and Ankor before the Town in 4 or 5 Fathom, Up to the Northwards is *Great Bay*, but is Shoaldy on both ſides. There goeth through a little Creek towards old *Aberdeen*, which is an old ruinous Town

Boockneſs. From *Aberdeen* to *Boeckneſs* the Courſe is North North-eaſt 12 or 13 Leagues: Betwixt them both lyeth a Tide-Haven. *Boeckneſs* is a high Hill, and lyeth upon the South ſide of the Point. To the Northwards of *Boeckeneſs* lyeth a Bay as a Ha-

Spy. ven called *Spy* or *Spilaert*, and right before the Shore lyeth a Sand called *Ruttenbrugh*, which you muſt take great care thereof as you come from the Northwards. From thence the Land lyeth in Weſt, and Weſt Southweſt unto the Haven of *Roſs* or *Luverneſs*.

Cape Tarba. To the Northwards of *Roſs* lyeth an out-Point called *Cape Tarbate*, right in the bottom of the Bay betwixt *Cateneſs* and *Boeckeneſs*, diſtant from *Boeckeneſs* about 19 or 20 Leagues In this Bay are many Havens and Sounds, which are deep enough for to come into with great Ships. It is from thence to *Cateneſs* 14 Leagues Northeaſt and by North, *Cateneſs* lyeth from

Boeckneſs

Boeckeneſs Northweſt, and Northweſt and by North 20, 21, or 22 Leagues, From *Boeckeneſs* unto the outermoſt *Orkaneſs* it is North and by Weſt, and North Northweſt, 32 or 33. Leagues.

The *Orkaneys* are 31 Iſlands in number, firſt *Wayets* or *Elhoy*, which lyeth next to *Scotland*, 5 Leagues about the Point. About North Northeaſt off from the Point of *Cateneſs* lie two little Iſlands *Pits* and *Pichlandſcare*, there you may run through to the Weſtwards betwixt *Elhoy* and *Scotland*.

To the Northwards of them lyeth an Iſland called *Heynda*, with another Iſland called *Platta*; to the Northwards of *Platta* lyeth *Majland* or *Ponoma*. On the North ſide of this great Iſland are all the Havens where the Ships come to.

Upon the Eaſt ſide of this great Iſland lyeth another Iſland called *Kabunſa*, to the Northwards of it lyeth another Iſland at the Northeaſt Point of the great Iſland; you may alſo run through there towards *Papeweſter*, and leave *Sanda* lying on the Starboard ſide.

Cloſe to *Papeweſter* lyeth Fara, to the Southwards of it is *Sirza*. To the Eaſtwards of *Sirza* and *Fara* lie two Iſlands, in the midſt of all theſe Iſlands, called *Eeda* and *Chapnoza*.

Sanda lyeth to the Northwards of all theſe Iſlands, but *Papa* and *Stronza* lie to the Southwards of *Sanda*.

To the Eaſtwards of *Stronza* lyeth an Iſland called *Cuiſtella*, that is the Eaſtermoſt Iſland of all, the Northermoſt is called *Ronalze* or *Northernaſe*.

Eleven or twelve Leagues Northweſt from the great Iſland lie two Rocks, the one under water, and the other above water; he that cometh from the Weſtwards muſt take heed of them.

Of

Of the Tides and courses of the Streams.

ON these Coasts betwixt *Tinmouth* and St. *Abbens-head* a Southwest and Northeast Moon maketh high water.

At *Leeth* in the Haven a Southwest and by West Moon maketh full Sea.

The Flood falleth along these Coasts South Southeast, and the Ebb North Northwest.

At *Orkanes* and *Boeckness* a Southwest and Northwest Moon maketh high water.

The Flouds come about from behind *Scotland* from the Westwards through betwixt *Fairhil* and *Orkanes*, and make thereabout full Sea with a Southwest and Northeast Moon.

From *Boekeness*, the Flood falleth South along the Coast towards *Leeth*, and the Ebb North to the contrary.

In this fair way it is deep 40, 50, and 60 Fathom, in 45, 50 Fathom, you may see the Land. In this fair way in the Summer the first Herrings are caught.

Heights.

St. *Abbens-head* in *Scotland* in	56 *degr.* 12 *min*
Boeckeness lyeth in the height of	57 *degr.* 55 *min.*
Cateness in	58 *degr.* 40 min.
The greatest or the outermost Island of the *Orkanes* in	59 *deg.* 8 *min.*

How these Lands do lie one from the other. See the Pilots Sea-Mirrour, *pag.* 22, 23.

How theſe Lands do ſhew themſelves at Sea.

Thus ſheweth Boeckeneſs *when you Sail along by it.*

In this form ſheweth the Land Cateneſs, *when you Sail along by it.*

Thus ſheweth the Northeaſt Point of Orkaneſs, *when you Sail along by it.*

III Demonstration.

Wherein,

Are ſet forth the Coaſts of Fair-hil, Hitland, *and the Iſlands thereabouts; as alſo the Iſlands of* Fero, *and ſome Iſlands behind the Northweſt corner of* Scotland.

Fair-hill. THe Iſland *Fair-hill* lyeth from the Eaſt Point of the *Orkaneſs* Northeaſt, and from *Boeckeneſs* North and by Weſt about ſeven and thirty Leagues.

On the Weſt ſide of *Fair-hill* is at ſome places foul Ground, but upon the Southeaſt ſide is good Ankor-ground, there you may Ankor every where; but there ſtretcheth a Riff on the Eaſt ſide of the Shoar off Southeaſt 2 Leagues into the Sea.

Fulo. *Fulo* lyeth from *Fair-hill* Northweſt and by North 10 Leag. betwixt them both lyeth the Southermoſt Point of *Hitland*, lying from *Fair-hill* North Northeaſt 7 or 8 Leagues, and from *Fulo* Eaſt and by South 4 Leagues.

The Southweſt Coaſt of *Hitland*, *viz.* (from the Southermoſt Point to the Northweſt Point) lyeth Northweſt and by North 8 or 9 Leagues. On the ſame Southweſt ſide, over againſt the Iſland *Fulo* lyeth a Sand-bay, where Men may Ankor, but on the eaſt ſide of this Bay it is ſomewhat foul. From that Northweſt or Weſt Point off to the North end, the Land of *Hitland* lyeth Northeaſt and by North, and Southweſt and by South 20 or 21 Leagues.

Two

Two Leagues to the Northwards of the foreſaid Weſt Point lyeth the Haven of St. *Magnus*, which is a broad Sound, within it is good Ankor Ground in 16 or 17 Fathom depth, according as you ſhall be far within the Land. On the North ſide lyeth a high Rock, where you muſt run in to the Southwards of. And on the South ſide lyeth 2 or 3 Rocks, which you muſt leave on the Starboard ſide, when you Sail in there. S. *Magnus*

Even to the Eaſtwards about the South Point of *Hitland* lyeth a fair Sand Bay, where you may Ankor in 12 or 13 Fathom; from thence to *Hanglip*, the Courſe is Northeaſt ſomewhat Eaſterly 8 or 9 Leagues.

Betwixt *Hanglip* and the South Point lyeth an Iſland, which you may Sail about on both ſides; within it lyeth *Hambrough haven*, or the *Scottiſh haven*, which is a lade place for the *Hamburgers* and *Scots*. This Haven is alſo called *Bremer haven*. There lyeth alſo a high ſteep Point to the Southwards of *Hanglip*, to the Southwards of it Men do run into *Broad-Sound*, the chiefeſt Haven of all *Hitland*, which is deep, and hath clean Ground; there Men do lie Land-lockt for all Winds. *Hanglip*. *Hambrough Haven*. *Broad-ſound*.

From the *Broad-Sound* lyeth a Sound in along to the Northwards, through the Land, which commeth out again into the Sound to the Northwards, and ſo maketh an Iſland of the Land whereupon the high Hill *Hanglip* lyeth. When as you will Sail in there from the Northwards that is to the Northward of *Hanglip*, you muſt run in neareſt by the South Shoar, and edge to it betimes. In this Channel betwixt both Lands lie 2 Iſlands or Rocks, the greateſt lyeth neareſt the North Shoar, and the ſmalleſt neareſt the South Shoar; betwixt them both lyeth alſo a ſunken Rock, which at low water is uncovered, and at high water you may know it by the breaking upon it. When you will Sail in here, you muſt leave the foreſaid greateſt Rock, with the ſunken Rock, on the Starboard ſide, and the ſmalleſt Rock on the Larboard ſide; there is upon the ſhoaldieſt three Fathom and a half water.

Within this Haven lie alſo two Havens at the North Point, which lie into the Land, where there is good lying.

When as you will Sail from this foreſaid Haven through within unto the *Broad ſound*, you ſhall meet, ſcarce halfways with a Rock, from which lyeth off a Riff towards the Weſt Shoar thwart of it, you muſt run cloſe along by the Weſt Shoar for to avoid that Riff.

To the Northwards of *Hanglip*, the Land of *Hitland* lyeth North, and North and by Eaſt, and North Northeaſt, at leaſt North, and at ſome places you may Sail in through *Hitland*, eſpecially to the Northwards of *Walſoen*, where a fair broad Sound lyeth Northweſt through; there is good Ankor Ground to find at ſome places, for thoſe that are there acquainted. From *Hanglip* to the Northeaſt Point of *Hitland*, the Courſe is North Northeaſt 10 Leagues, there lie ſome out-Rocks called the *Out-ſchares*. From thence along to the North Point of *Hitland*, the Courſe is North about 4 Leagues.

Outſcares.

A little about the Eaſt Point goeth in a fair Haven, called *Bloem-ſound*, lying in Southweſt. On the Weſt ſide lyeth a long Rock, you muſt Sail into the Eaſtwards of it, and Ankor a little within the Haven, it is there within all clean Sand Ground and good lying; *Bloem-ſound* lyeth in firſt (as hath been ſaid) South Southweſt, afterwards South, and South and by Eaſt, on both ſides is good Ankor Ground, there you may Sail altogether through, and come out again through *Jell-ſound* into the Sea, about the Iſland *Fero*.

Bloem-ſound.

Names of the Iſlands of Fero.

The greateſt and chiefeſt Iſlands of *Fero* are 12 in number, as *Suydro*, *Sando*, *Moggenes*, *Wage*, *Stromo*, *Oſtro*, *Calſo*, *Cuno*, *Bordo*, *Wydro*, *Swino*, and *Fulo*.

The little Iſlands of *Fero* are 10, as *Littledimen*, *Stoerdimen*, *Schurvo*, *Daliſtes*, *Heſden*, *Trallo*, *Colſter*, *Moggenſholme*, the *Monk*, and the *Biſhop*. Beſides theſe, there are yet ſome Rocks and little Iſlands, to 7 or 8 in number.

Suidro.

The Southermoſt great Iſland called *Suidro*, lyeth moſt Southeaſt and Northweſt about 7 or 8 Leagues. At the Southeaſt end of this Iſland lyeth a high Rock, called the *Monk*, or *Sambie*, after the name of the firſt or Southermoſt Haven in *Suidro*. Betwixt the *Monk* and the Southeaſt end of the Iſland *Suidro*, is a Race or Well, which Men muſt avoid, eſpecially with Spring-Tides.

Monk. Samby.

Upon

Upon the Weſt ſide of the Iſland *Suidro* are no Havens for to ſave any Ships in, but it is altogether high ſteep Land. On the North ſide are many Havens, where Men may Sail into and ſave Ships, as *Sommerſound* or *Heſt*, *Hofwick*, *Ureby*, *Quaelby*, or *Rane*, all broad Sounds or Havens; a Country-man or Pilot can bring you in there every where to your deſire.

From the Northweſt end of *Suidro* to *Moggenſholme*, the Weſtermoſt and outermoſt Iſland of *Fero*, the Courſe is Northweſt and by North, and North Northweſt about 8 Leagues. *Moggenſholm.*

At the Eaſt end of *Moggenſholme* lyeth *Moggenes*, to the Eaſtwards of it lyeth the Iſland *Wage*, and to the Eaſtwards of *Wage* goeth in a fair Sound from the Southwards off from the Iſland *Sando* about *Heſten* and the Iſland *Colſter*, for you may run in about theſe Iſlands on both ſides, and leave the great Iſland *Stromo* on the Eaſt ſide, and ſo come into *Wage*. In the midſt of the Sound of *Wage*, goeth up a Haven to the Eaſtwards into the great Iſland *Stromo*, therein you may Ankor in 10 or 12 Fathom, but the Sound is at leaſt 20 Fathom deep, *Moggenes.* *Wage.*

Moggenes and the Northeaſt end of *Fero*, lie Eaſt Northeaſt, or a little more Northerly, and Weſt Southweſt about 15 Leagues aſunder. Betwixt them both lie 10 Iſlands, and betwixt each Iſland is a fair broad and deep Sound, whereof the fourth off from *Moggenes* is called *Somſound*. All theſe Sounds lie moſt North Northweſt, and South South Southeaſt through the Land, and upon all theſe Iſlands ſtand Churches, except upon *Oſtra*, which nevertheleſs is a great Iſland. *Somſound.*

From the Southeaſt end of *Suidro* to *Scalhead*, or the Southeaſt end of the Iſland *Sando*, the Courſe is North and by Weſt about 5 Leagues. Betwixt *Suidro* and *Sando* lie the little Iſlands, *Little Dymen*, *Stoer Dymen*, *Schavo*, and *Daſſes*. *Scalhead.*

From *Schalhead* until within the Iſland *Muſo* (lying before *Stromo*) the Courſe is North and by Weſt 4 Leagues, there you may every where Ankor where you will, in 20, 30, or 40 Fathom. If any Man coming in out of the Sea, deſireth to ſee a good Road or Haven under the Iſlands of *Fero*, he ſhall keep that middlemoſt great Iſland *Stromo* Northweſt, and Northweſt and by Weſt from him; and then he ſhall ſee upon the middle *Little Dymen.* *Stoer Dymen.*

of

of the Island *Stromo* a high steep Hill called *Schellinck*, which he must Sail right in with, and so he shall meet with that foresaid Island *Mulso*, a low Island, which you may Sail about on both sides, but it is best for to run in there at the South; under this Island is all over good Ankor Ground. Right over against this Island, on the great Island, lyeth *Torshaven*; the chiefest Haven of *Fero*, where all the Trade of Merchandize is.

Torshaven. From *Torshaven* or the Island *Mulso* to the Northeast end of *Fero* the Course is Northeast, and Northeast and by East about 12 or 13 Leagues; betwixt them both lie 7 Islands, and betwixt each Island (as hath been said) goeth a broad Sound through the Land: lying through about Northwest, Northwest and by North, and North Northwest. The North end of *Fero* is about 4 Leagues broad, and lyeth Northwest and Southeast, and is called *Fulo*; thwart of it lyeth the *Bishop*.

Fulo.

The Bishop

He that desireth to Sail off from *Mulso* into *Somsound*, let him go on Northeast and by North 3 Leagues unto the Point of *Bordenes*, then up Northwest off from *Bordenes*, and then he shall espie a Church upon the Island *Calso*, which he must leave on the Starboard side, and go in along West Northwest untill he come into the Bight of the Island *Ostro*, and Ankor there in 17 or 18 Fathom.

These Islands of *Fero* lie in a Triangle, it is from the Southeast end of *Suidro* to *Fulo*, or the North end of *Fero* North Northeast, and South Southwest 21 Leagues asunder.

From *Scotland* Westwards, and to the Northwards of *Ireland*, lie many Islands, whereof we shall here describe some, with so much perfection, as thereof is yet known.

Names of the Islands The names of the principal Islands lying there, are these: *Areu*, *Ila*, *Jona*, *Mulla*, *Bragedul*, *Hun*, *Lewis*, S. *Patricius*, S. *Maria*, S. *Colane*, S. *Petous*, *Eph*, and S. *Kilda*, these are the greatest. There are yet some small Islands; as *Rona*, *Ghent*, *Trauta*, *Fladde*, *Grand Melul*, *Petit Melul*, *Stalpan*, *Canna*, *Rum*, *Egg*, *Mule*, *Cutte*, *Cardenbrough*, *Gronsay*, S. *Karbo*, *Lismont*, *Swinoy*, *Machare*, *Gegay*, *Caray*, and *Navarsay*. All these Islands do lie and belong under *Scotland*, and are those which by the Cosmographers are called *Insulæ Hebrides*.

The

The Iſland *Bar* or *Rona* is the Northermoſt Iſland lying behind *Scotland*, and lyeth from *Fulo* about Weſt Southweſt 37 or 38 Leagues; it lyeth by 2 other little Iſlands about a great League one from the other. *Barr or Rona.*

The Iſland of *Lewis* lyeth from *Rona* Southweſt, diſtant 16 or 17 Leagues, and from the North end of *Lewis* to St. *Kilda*, it is Southweſt and by Weſt 16 Leagues

On the Eaſt ſide of St. *Kilda* is a good Road for a Weſt and Northweſt wind. This Iſland lyeth from the other little Iſland, whereof the two are not very great, upon that which lyeth to the Weſtwards; you may ſee ſome Houſes ſtand, and theſe 2 little Iſlands lie 10 Leagues to the Weſtwards of the great Iſland of *Lewis*. Upon the Coaſt of *Lewis* lie alſo two rows of great Rocks, like as if they were little Iſlands, lying one from the other South and North ſomewhat Eaſterly about ſeven or eight Leagues.

The Southermoſt lie by 3 little Iſlands, but the Northermoſt lie by 8 ſmall little Iſlands or Rocks.

The Iſland of *Lewis* is divided into many parts, the which Men may Sail through at many and divers places *Lewis*, with the Iſlands belonginging to it, lie South Southweſt, and South and by Weſt about 29 Leagues.

But on the Eaſt ſide goeth a broad Sound through off 5 or 6 Leagues. Men Sail in cloſe by the Iſland of *Lewis*, about South Southweſt untill paſt the Iſland *Cheut*.

From thence the Sound lyeth through betwixt the great Iſland *Bragadul*, and *Lewis* South, and South and by Weſt towards the Weſt end of *Lewis*, called the *Ephts*; then you muſt leave *Mulla* and *Ila*, with divers many other Iſlands on the Larboard ſide.

Jona, *Ila*, *Mulla*, and *Bragadul* are 4 of the greateſt Iſlands, which are lying on the Weſt Coaſt of *Scotland*, and lie cloſe by the main Land; but there are many Havens and Sounds, ſo that there you may Sail in and about them every where.

At the Northweſt Point of *Ireland* lie alſo ſome Iſlands, which you may Sail through and round about them all.

Betwixt *Rona* and *Orkaneſs* lie alſo ſome Iſlands, which alſo you may Sail through, betwixt, and round about. He

He that falleth with theſe Iſlands muſt be very careful and circumſpect, for the moſt part of them are Inhabited by wild and Savage People.

In *Lewis*, and the Iſlands thereabout a Southweſt and Northeaſt Moon maketh the higheſt water, and likewiſe alſo without the North Point of *Scotland*.

Of the Tides and courſes of theſe Streams.

IN *Hitland* within the Havens and Sounds a South Southweſt and North Northeaſt Moon maketh full Sea. The Flood runneth there to the Eaſtwards, and the Ebb to the Weſtwards, eſpecially at the South end and North end of *Hitland*, and ſo fall thwart through the Sounds and Havens.

In the Iſland of *Fero* a North and South Moon maketh the higheſt water.

Under the Iſlands of *Fero* go very hard Tides, with great turnings, the Flood cometh there out of the Weſt, and Weſt Northweſt, the Ebb out of the Eaſt, and Eaſt Southeaſt, and fall ſo along through the Iſlands; there you muſt reckon your Tides thereafter; when you will Sail from the one Iſland to the other, there are 2 Wells or Maleſtreams, the one at the South end of *Suidro*, and the other a League within *Scalhead* at *Quaelneſs*.

Although the Tides do run ſo ſtrong through theſe Iſlands yet nevertheleſs it floweth not there 4 Foot up and down.

For to know the Courſes and Diſtances from place to place. *See the* Pilots Sea-Mirrour, *in* pag. 21, 22, 23.

Of the Latitude of theſe Lands.

THe South end of *Hitland* lyeth in	59 *deg.* 48 *min.*
The North end of *Hitland* lyeth in	60 *deg.* 50 *min.*
The South end of *Fero* lyeth in	61 *deg.* 15 *min.*
The North end in	62 *deg.* 20 *min.*
The Iſlands of *Rona* lyeth in	58 *deg.* 46 *min.*
The North end of *Lewis* lyeth in	58 *deg.* 18 *min.*
The Roek *Rokol* lyeth in	58 *deg.* 20 *min.*
The Northweſt Point of *Scotland* lyeth in	58 *degr.*

How theſe Lands do ſhew themſelves at Sea.

Fair-hill *being* 5 *Leagues Southweſt and by Weſt from you ſheweth thus.*

When Fulo *is Northweſt from you ſo far, that you may even ſee it out of the top, it ſheweth thus.*

Thus ſhews the Hanglip *when it is Northweſt from you* 8 *Leag.*

When as the North end of Hitland *is Southeaſt and by Eaſt from you, then it ariſeth thus.*

When S. Kilduyn *is Southweſt about* 5 *Leagues from you, it ſheweth thus.*

When the Iſland Lewis *lyeth Eaſt from you, then it riſeth thus, and then you are without S.* Kilda.

Thus ſheweth the Iſland Barre *or* Rona, *when it is* 4 *Leagues South Southeaſt from you.*

IV Demonstration.

Which unfoldeth,

The Coaſt of Flanders, *from the* Wielings *to the* Heads *about* Callice, *together with the Coaſt of* England, *from* Dover *to the* North Foreland.

BEtwixt *Wenduynen* and *Blanckenbrongh* ſtandeth another little Steeple, called *John Davids Steeple*. *Oſtend* lyeth a great League to the Weſtwards of *Wackerhout*. A half League to the Weſtwards of *Oſtend* lyeth S. *Catelyn*, and a League to the Weſtwards of it is *Middlekerk*, being a high thick flat Steeple. From *Middlekerk* to *Newport* it is 2 Leagues; there is a flat Steeple, with a little ſharp Steeple. A little to the Eaſtwards of *Newport* lyeth our Lady of *Lombardy*, a high flat Steeple.

From *Newport* to *Broers* it is 2 Leagues, and from *Broers* to *Dunkirk* 3 Leagues. The *Southkoten* is a League to the Eaſtwards of *Dunkirk*. *Dunkirk* hath a high flat Steeple, with a little ſharp Steeple. From *Dunkirk* to *Graveling* are 3 Leagues; betwixt them ſtand theſe Steeples, firſt, little *Sinten*, a little ſharp Steeple, great *Sinten*, a thick flat Steeple; *Mardike* a thick flat Steeple, and S. *Georges*, a high ſharp Steeple; *Graveling* hath no Steeples, but there ſtand 2 Mills, one on the Eaſtern-Gate, and the other on the Weſt end of the Town. From *Graveling* to *Callice* are three Leagues. *Callice* hath many ſharp Steeples, whereof one is higher than all the reſt, and betwixt both lie theſe Villages, moſt without

Steeples. Firſt, *Hoghenpriſe* and *Daſen*, two flat Steeples; more *Valdam* a flat Church with a little Spire upon the midſt of it, that is all the knowledge of *Flanders*. The Coaſt of *Flanders* betwixt *Callice* and *Blankenbrough*, is 24 Leagues long, or as ſome ſay 21 Leag and *Blankenbrough* from *Fluſhing* 9 Leagues. So that *Fluſhing* is from *Callice* at the leaſt 30 Leagues, or as ſome ſay 33 Leagues at the moſt.

That which is here ſaid of the Steeples and Leagues along the Coaſt of *Flanders*, is very well deſcribed and needful, as well for that which is before deſcribed of the *Wielings*, as alſo the Sailing into the Havens of *Flanders*, but eſpecially for the knowledge of the *Flemiſh* Banks.

Oſtend. For to Sail into *Oſtend*, you muſt run cloſe to the Eaſtwards of the Town into the Haven, called the *Gueule*; on the Eaſt Point of the Haven lyeth a Head, whereupon ſtandeth a Beacon, you muſt run cloſe in by that Head, there it is deepeſt, from the Weſt ſide, *viz.* towards the Town, ſhooteth off a little Flat, whereof you muſt avoid that ſide a Ships length or two, at low water, and a common tide remaineth in this Havens mouth 6 foot, and at high water there is 12 foot water. A little within the Haven you may Ankor where you will, and at low water you may lie there with a great Ship afloat.

Newport. *Newport* is a Tide-haven which falleth altogether dry at low water, and at high water and a common Tide there is 13 Foot water; cloſe before the Havens mouth is a Bank, which lyeth from the Eaſtwards of the Haven of *Newport* over to the Weſtwards, thwart before the Havens Mouth, and at half Flood lyeth dry, and at high water there cometh no more upon it than 8 Foot water.

For to ſail into Newport. He that will go into *Newport*, muſt go in from the Weſtwards betwixt the foreſaid Bank and the Land, and Sail unto the Southwards of the Bank ſo long until that the innermoſt Beacon come even through, or to the Eaſtwards of the outermoſt, and then run in ſo right by them, and in along amidſt the Channel betwixt the Heads. Betwixt the Bank and the Land it is on both ſides flat riſing Ground, ſo that you may ſound the Shores on both ſides, but on the North ſide the Bank is ſomewhat ſteep, it is 3 Fathom deep cloſe along by it. Within the Havens mouth

it

it is ſet on both ſides of the deep with Beacons, where you muſt run through betwixt, until you come before the Town, which lyeth about a Canon ſhot from the Sea ſide. There is Fire in the Night upon the 2 great Beacons out, not longer than from half Flood to half Ebb.

From *Newport* to *Dunkirk* along by the Shore through within the Banks, it is clean without any foul Ground or Banks, and at low water 15 Foot deep, the nearer the ſhore the deeper. Thwart of the *Cloiſter Ten-Duynen* betwixt it and the *Broers-bank*, it is narroweſt, which lyeth not far from the ſhore; thwart of it you muſt go cloſe along by the ſhore.

The *Quade-bank* runneth off to the Eaſtwards of the Head of *Dunkirk*, at leaſt two Leagues to the Weſtwards ending thwart of the Heads of *Dunkirk*. To the Eaſtwards of the Eaſter Head of *Dunkirk* Men may Ankor behind this Bank, and lie ſheltred for a Northweſt, North, and Northeaſt wind, it is two Fathom deep there at low water, but in the coming in, it is ſhallower Before the Havens-mouth of *Dunkirk*, it is 9 and 10 Fathom deep, and to the Weſtwards of the Weſter-head of *Dunkirk* 6, 7, and 8 Fathom; from thence Men may run over the ſmall Bank in 3 Fathom, and come againſt the broad Bank. This ſmall Bank lyeth right thwart before the Haven of *Dunkirk viz.* betwixt *Dunkirk* and the broad Bank. *Quade-bank.* *Small bank*

For to Sail into *Dunkirk*, you muſt bring the Fires within a Capſton Barrs length one to the other, *viz.* the innermoſt ſo much to the Eaſtwards of the outermoſt, keep them ſo, and run in then cloſe along by the Eaſter-head; the Weſter-head lyeth ſomewhat further off into the Sea than the other; thwart of it lyeth a Sand-plate with ſome Pales, therefore you muſt avoid it, and run in cloſe along by the Eaſter-head it is a narrow Haven, and at high water, and a common Tide, there cometh no more than 12 Foot water. In the Night they do Fire there as at *Newport*; from half Flood to half Ebb, and the loweſt Fire-beacon ſtandeth next unto the Sea. *For to ſail into* Dunkirk.

From the Weſter-head of *Dunkirk* runneth off a Bank about two Leagues long, called the *Splinter*, which falleth dry at low water at many places, Men may Sail in by the ſhore, behind *The Splinter*

this

this Bank from the Weſtwards almoſt to the Weſter-head of *Dunkirk*, and there may come to an Ankor in 5, 6, 7, and 8 Fathom. About half a League from the foreſaid Weſter-head, there runneth a Slenk through the foreſaid Bank, where little Ships may go through at high water.

Graveling *Graveling* is alſo a Tide-Haven, where Men muſt go in at high water, there ſtand two Beacons, which you muſt keep one by the other, and Sail ſo in betwixt the Heads; on the Weſt ſide runneth off a little Riff, which you muſt avoid. When you come from the Eaſtwards along the Coaſt running through *Wolbrek-ſound*, at the end of the *Brakes*, (that are the Banks before *Dunkirk*, and from thence Weſtwards) then you come againſt the Weſt Point of the foreſaid little Riff or out-Sand of *Graveling*, which lyeth a good way off into the Sea; to the Eaſtwards of it Men run into the Haven of *Graveling* by Night right in with the Fires.

To the Weſtwards of the Haven of *Graveling* lyeth a Bank or Flat along the ſhore, lying a good way off from the Land to Sea-wards, almoſt as far to the Weſtward as *Callice*, called the *Newland.* *New-Land*; Men may run along by it, or over it in 5, 4, and 3 Fathom, according as Men will.

Callice. The Haven of *Callice* falleth every Tide altogether dry, and at high water with a common Tide, there is no leſs than three Fathom water. For to Sail in there, you muſt keep the Mill (ſtanding on the Eaſt corner of the Town) right over the Eaſter-head, and run in ſo cloſe along by the Eaſter-head, and let the Caſtle lie on the Weſt ſide of you; from the Weſter-head runneth off a little Riff, therefore you muſt avoid it. When you are come in within the Weſter-head, you muſt go up to the Weſtwards into *Paradiſe*, and there lie dry at low water. By Night when the Tide ſerveth, there ſtand two Fires, you muſt run in right with them. It is not good to come into this Haven before high water, becauſe of the exceeding ſtrong Tide that runneth in there with the Flood, for to avoid the Ankors of the Ships, which lie there within. It is there within dangerous and bad lying, eſpecially with a Northerly wind, which bloweth there open in.

Thwart

Thwart off from Weſter-head of *Callice* lyeth a Bank of 2 Fathom, betwixt the Head or *Meyland*; and the ſame Bank Men may run through in 3 Fathom at half Flood, the Bank is two Fathom deep. Under *Callice* Cliff, at the Eaſt end, Men may Ankor in 10 Fathom; but at the Weſt end lyeth a Rock under water a Bow ſhot from the Land. *Callice* Cliff lyeth betwixt *Callice* and *Blankneſs*. *Callice-cliff*

Of the Flemiſh *Banks.*

WEſt from *Weſt-Cappell*, and Northweſt from *Oſtend*, about 9 Leagues without the Coaſt of *Flanders*, lyeth a little Plate, whereupon at low water is no more than 22 Foot water, in foul weather the Sea breaketh very much upon it.

About two Leagues from *Oſtend* without the Land lyeth the *Trick*, or Outer-bank, upon it there is no more than 15 or 16 Foot water. When *St. Katherines* Steeple cometh againſt *Oſtend*, then you come on againſt this Bank: betwixt this Bank and the Heads of *Oſtend*, lyeth another Bank of 3 Fathom water. *The Trick.*

Betwixt *Oſtend* and *Newport* lie 4 Banks, all which 4 begin about thwart of *Oſtend*; the 2 neareſt to the Lands end thwart of *Newport*. The other lie all along the Land almoſt to *Dunkirk*: the firſt and neareſt to the Land is called the *Geer*, betwixt that and the Land goeth a Channel through, of 8, 9, and 10 Fathom. *The Geer.*

The ſecond called *Laland*, endeth alſo againſt *Newport*; betwixt theſe two goeth a Channel through of eight and nine Fathom. *Laland.*

The third are two Banks one from the other, the Eaſtermoſt ending half ways: *Laland* is called *Stroom*, the Weſtermoſt ending *Stroom.*

Stonebank. ending thwart of *Dunkirk*, is called the *Stone-bank*, which hath on the Eaſt ſide a Hook which lyeth to Eaſtwards, running to nothing almoſt againſt *Newport*: this Bank is 3 or 4 Fathom, and upon the Eaſt end thereof 5 and 6 Fathom.

Sandele. Calbank. Oudemoers Bank. The fourth is alſo in 2 Banks, the Eaſtermoſt is called *Sandel*, or *Oudemoers* Bank, and the Weſtermoſt *Calbank*, of ſome called alſo *Small-bank*, which lyeth along by the *Broad-bank*: but that outer end lyeth at leaſt 2 great Leagues off.

The Ships that will go before *Dunkirk*, and cannot get along by *Flanders*, do run about without theſe Banks, until they come againſt *Broad-bank*, and then run in along by it 5 or 6 Fathom. The Channel is 15 Fathom deep, and every one of theſe 4 Banks hath a dry *Poelder*. When 2 Steeples (that are ſomewhat flat to the Southward of *Newport*) ſtand a Hand-ſpikes length aſunder, then are you thwart of theſe 4 Banks here before mentioned, which are not deeper at low water than 1 Fathom, and at Spring-Tides fall almoſt dry.

Betwixt all theſe Banks you may Ankor in 9, 10, 11, and alſo in 12 Fathom; you may run over them in 4 Fathom, but when you are to the Weſtwards of them you ſhall find it deeper, (*viz.*) 8, 9, and 10 Fathom.

Broers-bank. The *Broers-bank* is 3 cornered, and lyeth cloſe by the Land thwart of *Broers* and the *Cloiſter Ten-dnynen*, and lyeth off from the ſhore about Weſt Northweſt a League into the Sea; when the *Cloiſter Tendnynen*, or the *Broers* lie South from you, then you are at the innermoſt part of the *Broers-bank*, you may run through betwixt the Land and this Bank, in 4 Fathom at low water; but Men do run commonly about to the Weſtwards of it, when they Sail through within the Banks along the Coaſt of *Flanders*.

Cams-bank. A little to the Weſtwards of *Broers-bank* lyeth the *Cams-bank*, which is 3 Fathom deep, and lyeth in many Races; you may run through betwixt the Land and this Bank alſo in 8, 9, and 10 Fathom, and alſo may ride there for all winds. By the Land, betwixt this Bank and *Broers-bank*, it is 5 Fathom deep. When you run through betwixt this Bank and the Land, then you come along by the *Quade-bank*, until you come before

fore the Haven of *Dunkirk*. When you are a good ways paſt the Head of *Dunkirk*, about Southweſt from the *Splinter*, then you run over a Shoald of 2 Fathom called *Wilbaert-ſound*, being over it, you ſhall have again then 11 and 12 Fathom. When *Borburger* Steeple cometh in the Valley of the Sand-hill, then are you thwart of this Bank; by theſe Marks you may Sail through theſe Banks North Northweſt into the Sea, and come againſt the Tail of the Broad bank in 4 Fathom. When as that you do edge again ſomewhat towards the Land in 12, 13, or 15 Fathom: then you may Sail through betwixt the Broad and the Small Bank, on Eaſt Northeaſt, or Eaſt and by North, until you are paſt the *Cloiſter Ten-duynen*, or the *Broers-bank*, which lyeth off from the *Cloiſter* about a League into the Sea. To the Eaſtwards paſt this Bank it beginneth to be ſhoald water againſt *Newport* 4 or 5 Fathom; being paſt *Newport*, you muſt edge towards the Land in 8 or 9 Fathom, keeping cloſe to the Land, and then you ſhall run through betwixt the Land and the *Geer*, (which lyeth along towards *Oſtend*:) When you come againſt *Oſtend*, then you are clear of the Banks, and then you may run into the Sea for to go into the *Wielings*. *Wilbaert ſound.*

There lie yet 5 long Banks along *Flanders*. When *Gravelling* is Southeaſt from you, then are you thwart of the South end of theſe Banks; and when *Newport* is Southweſt from you, then you are thwart of the North end of them, they are very long, and betwixt each goeth a wide Channel through, of 8, 9, 12, 15, 16, 18, 19, and 20 Fathom deep, each of a ſeveral high depth. *Marks of the Flemiſh Banks.*

The outermoſt or Weſtermoſt Bank called the *Cliff*, lyeth from *Callice* Cliff, North Northeaſt about 4 Leagues and an half, and is 3 Fathom and an half deep: betwixt this and the other goeth a wide Channel through, of 23 and 24 Fathom deep. *The Cliff.*

The ſecond called the *Ruyting*, lyeth from *Callice* Cliff Northeaſt and by North about 4 Leagues, and is there 5 or 6 Fathom deep; but upon the South end of it is a *Poelder* of 2 Fathom and a half. When the South end of *Wincoxbergen* cometh betwixt the two flat Steeples to the Weſtwards of *Dunkirk*, *The Ruyting*

kirk, then are you thwart of this *Poelder*.

There ſtand 3 or 4 Mills to the Eaſtwards of *Dunkirk*, when the outermoſt commeth over the Eaſt end of the Town, that is alſo a good Mark of this *Poelder* or Shoald, and then the Steeple of *Dunkirk* ſhall be from you Southeaſt 5 Leagues.

Betwixt this and the third goeth alſo a Channel through of 12 and 13 Fathom.

The Dike. The third called the *Dike*, lyeth from *Callice* Cliff Northeaſt, and is deep 4 and 5 Fathom; upon the S. & N. end of this Bank are *Poelders*, the Southermoſt is deep one Fathom, and lyeth alſo upon the Marks of *Wincoxbergen* about Northweſt, ſomewhat Weſterly from *Dunkirk*, and is called the *Polder* of the *Dike*, or *Dike-polder*; the other *Polder* or Shoald of this Bank, is about 4 Fathom and 2 Foot deep, and lyeth Northweſt from the *Cloiſter Ten-duynen*. Theſe Banks are very dangerous; for the *Ruyting* lyeth almoſt in the fair way, and at low water they have no more than 2 Fathom depth.

The fourth Bank called *Kettle-bank*, lyeth from *Callice* Cliff Northeaſt and by Eaſt, and is deep 3, 4, 5, and 6 Fathom. Upon the South end is a Shoald of 1 Fathom at low water; at Spring-Tides theſe *Poelders* fall dry. Along by this goeth alſo a Channel through of 19 and 20 Fathom.

To the Eaſtwards of the *Kettle-bank*, (*viz.*) betwixt that and the Broad-bank goeth through a great Channel of 19 and 20 Fathom.

In all the Channels betwixt the foreſaid Banks, Men may turn to windwards every where from one Bank to the other, and Ankor betwixt the Banks where they will.

Broad-bank. The South end of the Broad-bank lyeth from *Callice* Cliff Eaſt Northeaſt, and hath one Shoald upon the South end of one Fathom and a half, is throughout 3 and 4 Fathom deep.

The North end is deep 6, 7. and 8 Fathom, and lyeth ſo far to the Northward, until *Newport* be Northweſt from you, or the *Cloiſter Ten-duynen* be North Northweſt 5 or 6 Leagues from you.

The Coaſts of England, *from* Dover *to the North* Foreland.

BEtwixt *Callice* and *Dover*, amidſt in the fair way, (or ſomewhat nearer the *French* ſide than the *Engliſh*) lyeth a narrow Bank of 4 Leagues long, lying about North North-eaſt and South Southweſt along the Land of *Blackneſs*, being called the *Vaen*, and by the *Dutch-men* called *Vrow-ſand*, of 5, 6, 7, and 8 Fathom depth, and runneth to the Southwards towards the Land of *Bulloyn*, Weſt and by South from *Callice* Cliff, and South, and South and by Eaſt from *Dover*, is the ſhoaldieſt of it, at low water not deeper than 16 or 17 Foot. On both ſides of this Bank, as well along to the Eaſtwards as to the Weſtwards of it, it is 20, 22, 23, and 24 Fathom deep. Men may Ankor before *Dover* for a North and Northweſt wind, right againſt the Caſtle, in 10 Fathom is the beſt Road, and clean Ground. For to Sail into the *Downs* from the Southwards, you muſt run about the South *Forleand*, within 2 Cables length along by the Land, and Ankor thwart of the middlemoſt Caſtle in 7 or 8 Fathom.

The Southermoſt Point of *Gooding*, and the South *Foreland* lie Northeaſt and Southweſt aſunder.

Betwixt *Gooding* and the *Valley* in the Land off the North *Foreland*, called *Ramſgat*, lie 2 Shoalds, whereof the Weſtermoſt is called the *Querns*, and the Eaſtermoſt the *Brakes*. *Gooding.*

For to Sail from *Dover* (through within the *Gooding*, betwixt the *Gooding* and the *Brakes*,) to the North *Foreland*, you muſt go on North and by Eaſt ſo long until that the Mill upon the North *Foreland* come to the Weſt ſide of the *Valley* in the North *Foreland*, then go yet North and by Eaſt, and North North-eaſt, untill that the little Steeple upon the North *Foreland* come to the Eaſt ſide of the foreſaid *Valley*, then you ſhall be to the

Northwards of the *Brakes*, and then the little flat Steeple on the South *Foreland* cometh too, or right over the third white Chalk Hill to the Northwards of the South *Foreland*, that is a direct long Mark, for to Sail through betwixt the *Brakes* and *Gooding*, as well when you come from the Northwards as from the Southwards.

Brakes. For to Sail through within the *Gooding* from the Northwards, you muſt not come nearer the *Brakes* than in 7 Fathom, and ſet the South *Foreland* South Southweſt from you, and Sail then ſo right with it, and then you ſhall run along the beſt deep. When as the flat Steeple upon the North *Foreland* ſtandeth in *Ramſgat* or the *Valley*, then you ſhall be thwart of the *Brakes*, and when the Mill commeth in *Ramſgat*, you ſhall be to the Southwards of the *Brakes*.

Querns. When you lie in the *Downs*, and that the inner point of the Cliff off the South *Foreland* lie South Southweſt from you, then the *Querns* lie North and by Eaſt from you, and the end of the *Gooding* Northeaſt from you.

The North end of *Gooding*, and the Point of the North *Foreland*, lie Southeaſt and by Eaſt, and Northweſt and by Weſt a League and a half aſunder.

For to ſail through betwixt the Brakes & *the* Querns For to come into the Northwards into the *Downs* through betwixt the *Brakes* and the *Querns*, there ſtandeth a Church upon the high Land of the South *Foreland*, to the Northwards of it, which is a flat Steeple, and the Church ſomewhat great of Body, and there are 3 Caſtles upon the Strand of the *Downs*; you muſt bring the foreſaid Church with the flat Steeple right in the midſt betwixt the two Southermoſt Caſtles, and then you are in the fair way in the middle of the Channel, and that will ſerve for a leading Mark to run through betwixt the *Brakes* and the *Querns*, and the Courſe lyeth through South Southweſt. If the wind be Southerly, that you muſt turn to windwards through, run not further over to the Eaſtwards than that the foreſaid Church come within 2 Ships length of the Southermoſt Caſtle; for if you ſhould bring them nearer, or together, then you ſhould run upon the *Brake*, and being caſt about run not further over the Weſtwards then that the foreſaid Church come within two

Ships

Ships length of the three; for if you ſhould bring them them nearer together, you ſhould run upon the *Querns*; and theſe Marks will ſerve to turn to windwards through betwixt the *Brakes* and the *Querns*, either from the Northwards or the Southwards. The *Brake* is ſteep, being 5 Fathom cloſe along by the ſide of it, and in the middle of the Channel is but 15 Foot at low water, ſo that it is deeper by this ſide of the *Brake*, than in the middle of the Channel. As you turn to windwards, and run over to the Eaſtwards towards the *Brake*, as ſoon as you muſt caſt about, or elſe you ſhould be againſt the *Brake*; the *Quern* is flat, but nevertheleſs as ſoon as you find it ſhoaldier (in running over to the Weſtwards the of *Quern*) than 15 Foot, you muſt caſt about again, and ſo turn through. About half a League from the North end of the *Gooding* to the Southwards, lyeth off a flat Tail or Spit of Sand to the Weſtwards from the *Gooding*, a great Muſquet ſhot off, and falleth dry a good ways off at low water, which maketh the Channel there betwixt the *Gooding* and the *brake* very narrow; the thwart Marks of this Tail of Sand are theſe: up within the Land a little to the Southwards of *Ramſgat*, ſtand 3 or 4 high Trees together, when theſe Trees do come right over the Southermoſt end of the Cliff that lyeth alſo a little to the Southwards of *Ramſgat*, then you are thwart of this foreſaid Tail of Sand; as ſoon as you ſhall be paſt it, then you ſhall have more room to turn to windwards, and may run further over the *Gooding*.

Thwart marks of a Tail of Sand lying off from the Gooding.

For to Sail from *Dover* without the *Gooding* to the North *Foreland*, you muſt keep the Point to the Weſtwards of *Dover* without the South *Foreland*, and go on Northeaſt until that the North *Foreland* come Northweſt and by Weſt from you, then you may boldly run to the North *Foreland*, and Ankor before *Margate*, or where that you ſhall think it beſt, but thwart of the Steeple, where the Mill ſtandeth by, is the beſt Road. Or when the Point of the North *Foreland* lyeth South Southweſt, and Southweſt and by South from you; there is alſo good riding in 8, or 9 Fathom. Betwixt *Margate* and the *Reculvers*, Men may Ankor every where in 6 or 7 Fathom at half Flood.

For to run about a Sea board off Gooding.

Betwixt

Betwixt the *Querns* and the North *Foreland* Men may alſo run through to *Sandwich*, there runs off a little ſtone Bank from the ſhore, called the *Fourfoot*, betwixt that and the *Querns* it is at half Flood 2 Fathom deep. The *Querns* are lately grown much leſs, and ſhifted, ſo that the North end of them is almoſt gone.

Of the Tides and Courſes of the Streams.

ALong the Coaſt of *Flanders* on the Land, a South and North Moon maketh full Sea.

In the fair way without the *Flemiſh* Banks in the Sea, a Southweſt Moon maketh high water.

In the midſt betwixt the Heads, a Southweſt Moon.

At *Dover*, a South and North Moon.

In the *Downs* a South Southweſt Moon.

At the North *Foreland*, a South and North Moon.

Along the *Flemiſh* Banks, the fore-Flood falleth over the Banks towards the Land, about the third part of the Tide, afterwards along the Land, but the after-flood falleth to the Northwards along the Sea in the right fair way.

When the Flood beginneth to go there thwart off at Sea, then it is already half Flood on the Land, and the water flowen half ways, ſo that Men may go into all the Havens on the *Flemiſh* Coaſt with 5 or 6 Foot water.

In the midſt through the Heads, the Flood falleth Northeaſt and by Eaſt, and the Ebb Southweſt and by Weſt.

From *Dover* to the North *Foreland*, the Tide falleth through within the *Gooding* North and South, over the *Brakes* and *Querns*.

Before *Callice* and *Blackneſs*, the Flood falleth firſt one quarter to the Land, afterwards North Northeaſt.

Of the Depths.

IN the right fair way betwixt the *Marſdeep* and the *Heads*, it is 23 and 24 Fathom deep. A little without the *Flemiſh* Banks 18, 19, and 20 Fathom, but near *Gooding*, or about the North *Foreland*, it is 26, 28, and alſo 30 Fathom deep, the nearer *Gooding* the deeper water.

Being thwart of *Gooding* in 28 or 29 Fathom, you ſhall not be 2 Shots of a caſt-Piece from it.

For to Sail out of the *Marſdeep* towards the *Head*, go not on otherwiſe than Southweſt and Southweſt and by South, (but you muſt be very careful to take heed of the Tides) when you ſhall reckon to have Sailed 40 or 46 Leagues, then edge over to the *Flemiſh* Banks, untill you come in 20 or 18 Fathom; when that you are ſure off theſe Grounds, then go on Southweſt, and at length Southweſt and by Weſt, and you ſhall come in the midſt betwixt the Heads of *Callice* and *Dover*.

Flanders you may ſee from the Poop in 16 Fathom, and then you are within the Point of the *Flemiſh* Banks.

Callice Cliff, and the South *Foreland*, or the Point of *Dover*, you may ſee when you are before them in 24 Fathom.

Courſes and Diſtances. *See* Pilots Sea-Mirrour, *pag.* 29.

Of the Latitudes.

The *Heads* and *Dover* lie in 51 *degr.* 12 *minn.*

How

How theſe Lands do ſhew themſelves at Sea.

Wendunynen. *Oſtend.* *Middlekirk.* *Newport.*

Wackerhout. *S. Catelina.* *Lombardſide.*

Thus ſheweth the Coaſt of Flanders *betwixt* Oſtend *and* Newport.

Thus ſheweth Dover *when you Sail to the Weſtwards of the* Vaen, *or* Vrow-ſand, *through the* Heads.

When you run from the Downs *towards the North* Foreland, *then the Land ſheweth it ſelf thus.*

Newport. *The* Broers. *Sontkoten.* *Dunkirk.*

Graveling. *Callice.*

Thus ſheweth the Coaſt of Flanders, *betwixt* Newport *and* Callice, *when you Sail along by it,*

V. Demon.

V Demonstration.

Wherein

Are ſet forth the Coaſts of France, *from* Blackneſs *to the Iſland* Oldernay, *or* Ornay, *and from* Dover *to* Beachy.

ABout a great League to the Weſtwards of *Callice* Cliff, lyeth *Blackneſs* a foul out Point, thwart of it lie many Rocks along the ſhore. From *Blackneſs* to the River of *Bullen*, lyeth the Coaſt South and by Eaſt 3 Leagues; a League to the Southwards of the *Neſs*, the Land falleth ſomewhat in with a fair Sandy Bay. In this Bay lyeth a Fiſher Village on the Coaſt; thwart of it in the Sandy Bay is a very good Road for Eaſterly winds, in 5, 6, 10, 15, and 16 Fathom, according as you will lie far from the ſhore. For to Ankor there, you muſt bring the ſteep of the Village over the midſt of the Houſes. This place is called St. *John*'s Road. A little to the Northwards of that foreſaid Fiſher Village, ſtands a Mill, with ſome Houſes; from thence to the Northwards you may not Ankor, for there the Ground is foul and Stony. To the Southwards of the Road towards the River of *Bullen*, lie alſo ſome little Rocks along the Coaſt, which you muſt not come very near to. *S. John's Road.*

Upon the North Point of the River of *Bullen* ſtandeth a high thick Tower, called the *Tour d'Ordre*, by the Sea-Men the *old man*, a ſpecial mark to know the River by. About an Engliſh Mile to the Northwards of this Tower, a little Mile from the ſhore, lyeth a little ſunken Rock under water, where a Hoy or Smack may not go over. *Tour d'Ordre.* *Oldman.* *Sunken-Rock.*

Bullen. Upon the South Point of the River of *Bullen* ſtandeth a Stone wall, and upon it a great Beacon of a Maſt; thwart of it from the South Point lyeth off a little Riff or Shoald, that you muſt ſhun, and run cloſe along by the Head wdich lyeth at the North Point, and hath been there lately made. When you are come within this Head, you muſt preſently let fall your Ankor, and ride there; It is a Tide-Haven, there you muſt go in at high water, and at low water lie drie upon the Chindle. Without, before the River lyeth a Bank, Men were wont from the Southwards to run in over in 2 Fathom, and from the Northwards in 3 Fathom; but it is now to the Southwards deeper, through the ſcouring of the water along the foreſaid Head, which is made at the North Point.

The Somme From the *Oldman*, or the River of *Bullen* to *Somme*, is the Courſe South about 11 Leagues; between them lie alſo 2 other Rivers, *Cauche* and *Aute*; upon the firſt lie *Eaſtaples* and *Monſtreu*; there you muſt go in a middle Channel at higheſt water, within it falleth altogether dry at low water.

For to ſail into the Somme. Men may Sail into the *Somme* through 2 Channels, from the Eaſt Point called the *Eaſt Donu*, lyeth off a Sand thwart before the Channel; to the Weſtwards of that Riff lyeth alſo another great Bank, between them goeth in the Eaſter-Channel. For to Sail in there, bring S. *Valery* a Cables length to the Weſtwards of the Weſt Point of the River, called the *Oordel*, and run in there upon, until you come to the Land at that foreſaid W. Point, and from thence cloſe along by it, or as ſoon as you get again deeper water over the Bank, then turn up Eaſtward toward the Beacons. From the Point of the *Oordel* lyeth off to the Northwards a little Riff, upon the end of it lyeah a Buoy which you muſt leave on the Starboard ſide, and run in cloſe about to the Northwards of it. From the Point of the *Oordel* upwards, it is ſet along with Beacons, you muſt run along cloſe by them, until you come within the Point of S. *Valery*, where you muſt Ankor, and lie every Tide drie. The Sands there within do ſhift ſo often, that they are not to be deſcribed for always.

For

For to Sail into the Weſtern-Channel, coming from the Eaſt or North, you muſt run along by the Banks in 6 or 7 Fathom, and not nearer; they are ſo ſteep, that a Ship ſitting faſt upon them with the Fore Caſtle, at the Stern hath 3 Fathom. Comeing towards the Land at the end of the Banks, you ſhall find a Buoy: Or elſe, if you come from the Weſt, and bring *Cretoy* a Cables length within the *Oordel*, and Sail to right in, you ſhall find the foreſaid outermoſt Buoy. Beſides this, there lyeth 3 other Buoys, whereof that foreſaid Buoy on the Point of the *Oordel* is the fourth, and the innermoſt; you muſt leave them all on the Starboard ſide towards the Land, and run in along by them to the Northwards of them. *For to ſail into the Weſtern-channel.*

Theſe Channels and Sands there within (all until paſt St. *Valery*) fall at low water altogether dry, the Buoys alſo fall dry, that Men may go by them; at half Flood with an ordinary Tide there is no more than 2 Fathom water; it is not good to go in there before that two third parts of the Flood be ſpent. With an ordinary Tide it floweth there 5 and 6 Fathom, but with a Spring-Tide 7 Fathom up and down. At high water, and Spring-Tide, a Man may go over all the Banks and Sands with 8 or 10 Foot water, 5 Leagues upwards lyeth *Abbeville*.

Thwart of the *Somme*, it is far off into the Sea ſhoald water, 5, 6, 7, 8, 9, and 10 Fathom, 3 or 4 Leagues off into the Sea: He that cometh from the Weſt, and findeth himſelf in dark and miſty weather, to be in ſuch ſhoalding, may be well aſſured not to be far from the *Somme*.

From the *Oldman* to *Diep*, the Courſe is South Southweſt 18 Leagues, but from the *Somme* to *Diep* Southweſt and by Weſt 8 or 9 Leagues. About half way between the *Somme* and *Diep* lyeth the River of *Hen*, within it on the North ſide lyeth *Treſport*, being alſo a Tide-Haven, where Men muſt go in at high water, and at low water lie dry. *Treſport.*

At the Eaſt ſide of the Haven of *Diep*, lyeth a Rank of Rocks, and from it lyeth a little Riff of Chindle towards the North, or the Weſt; to the Southwards of this Riff goeth in the Channel, about Southeaſt in, it is very narrow, and a ſhort Inlet, therein lie 3 Buoys in the midſt of the deep, not above a *Diep.*

ſtones caſt one from the other, Men may run in on both ſides of them; coming to the end of the Buoys, they muſt keep the middle of the Channel, and run in between the Heads, untill they come within the Town, and there make faſt with a Cable on the Shore. Men may not Sail in there before Flood, but not at half Ebb; at low water it falleth altogether dry, but within at the Town, Men may ride afloat, at high water there cometh 3 Fathom, or at the higheſt, not more than 3 Fathom and a half water. There come out always Pilots to bring Ships in.

S. Valery in Caux. From *Diep* to St. *Valery* in *Caux*, it is Southweſt and by Weſt 4 Leagues; that is alſo a Tide-Haven, where you muſt go in with high water; it is a narrow Channel, where you go in between to the Heads, there is neither Sand nor Bank before it that can hurt you; being come in, you may let fall your Ankor, and make you faſt with a Cable on the Shore. He that hath neither Cable nor Ankor, may (being come there within) Sail his Ship on againſt the Shore in the Chindle, and ſo ſave his Ship and Goods without dammage.

Fecam. From S. *Valery* to *Fecam* it is Weſt Southweſt 4 Leagues; that is a deep Tide-Haven; there remaineth at low water little leſs than 2 Fathom water. At the Eaſt ſide of the Havens-Mouth lyeth a Bank or Plate, Men may with ſmall Ships Sail in through between it and the Land, and ſo run in Sounding, borrowing it 8 or 9 Foot along by the Eaſt Shore, which is flat. For to Sail into the Weſtwards of the Plate, you muſt keep the Tower of *Fecam* without the Land, or without the Weſt Point of the Haven, and then it ſhall be S. Southeaſt from you, run then upon that Mark into the Haven, and then the foreſaid Sand ſhall remain on the Larboard ſide of you; and at half Flood you ſhall have in the Havens Mouth 2 Fathom water; being come in before the Town, you may Ankor there by the Weſtern Shore in 3 Fathom.

Struyſaert. From *Fecam* to *Struyſaert* it is Weſt Southweſt three little Leagues. Without the Point of *Struyſaert* lie 2 high ſharp Rocks. From thence to *Seynhead* it is South, and South and by Weſt 2 Leagues and a half.

About

About Northweſt from *Seynhead* lyeth a Bank, upon which at low water remaineth no more than 2 Fathom and a half water: When the Town of *New-Haven* cometh without *Seynhead*, then are you thwart of the Back; for to avoid it, run in cloſe aboard the *Seynhead*, along until you come within the firſt Mill, there let fall your Ankor in 6 Fathom, and ſtay for a Pilot to bring you into the Haven.

For to ſail into the River of Roan.

For to Sail into the River of *Roan*, coming from the North or the Eaſt, you muſt run cloſe aboard the Land to the Northwards of *Seynhead*, and along by it, ſo long until the South ſide of the River come unto the Point of *Seynhead*, then run in with it, until the Land to the Weſtwards of *New-Haven*, come without *New-Haven*; Sail then unto the Haven of *New-Haven*. Or elſe, if you will go without about the Bank or *Rettires*, then edge over to the Weſtwards ſo far from the Land, until the River come open, Sail then towards the Point of *Tochet*, and run in upon your Lead by it; there is at high water 3 Fathom, and at low water no more than 1 Fathom. The *Rettiers* is a ſtony Bank lying in the midſt of the River of *Seyn*, lying over towards the Point of *Honfleur*, at low water it falleth at ſome places dry, at half Flood it is to the Southwards 3 Fathom, but to the Northwards 2 Fathom deep. When the Land of *Caen* is without the Point of *Seynhead*, and you Sail then with it South on, then you run to the Weſtwards of it, or along without it. Or elſe, if you keep *Struyſaert* a Hand-ſpikes length without the Point of *Seynhead*, then you run alſo without it. When the Eaſter-Gate of *New-Haven* cometh over the Eaſter-Head, and the Eaſter-Mill, Sail then ſo on, keeping them ſo, then you run in right to the Northwards of the *Rettires*, and alſo you can take no hurt of the Bank that lyeth towards *Seynhead*. At *Habel* or *New-Haven*, Men muſt go in at high water, and within lie every Tide dry.

The River of *Sein* muſt be Sail'd into upon the Tide, when the moſt, or the ſtrongeſt of the Flood is ſpent, then you may Sail along by the Land upon your Lead, until you may ſee it open into the River of *New-Haven*, when then the Souther Caſtle cometh over the Eaſter-head, and the Mill; run then

right

right in upon it; but it is beſt to Ankor half way betwixt the Caſtle and *Seynhead*, and there to ſtay for a Pilot: If there come none off, then Sail from thence right with the Caſtle that ſtandeth upon the Head, there it is deepeſt water.

To Sail from *New-Haven* upwards towards *Roan*, is not well to be done without a Pilot; you muſt go with the Tide through the firſt Travail or Banks, which lie from *New-Haven* to *Honfleur* Southeaſt, along by the Souther-Land; and from thence along the North ſide of the River to *Quillebeuf*, being come there, you are through the firſt Travail. You muſt alſo be well adviſed, and take good heed for the ſtrong Spring by the *Normans* called *La barre*, which every Tide cometh on ſo ſtrong with the Flood, that Ankors and Cables have enough to do to hold a Ship: For that and other dangers more, it is not good nor convenient to Sail up the River without a Pilot.

Tochet. Two great Leagues to the Southwards of the River of *Roan*, lyeth a Tide-Haven called *Tochet*; on the Weſt ſide of the entry ſtandeth a Beacon, by it you muſt go in, or you may Sound it in by the Eaſter-ſhore. Southweſt, or Southweſt and by South from the Point of *Seynhead*, about 6 or 7 Leagues off, lie many Banks, a good ways in the Sea; you may Sail on both ſides of them (as well to the Eaſtwards as to the Weſtwards) into the *Foſs of Caen*, which lyeth in moſt South, and lyeth in a Bay. At the Weſt ſide lyeth a Chindle, where Men may ride within it, it is wide, and broad, and Sandy Strand; the Eaſt Land is Sand-Hills, and far flat in 6 and 7 Fathom; there Men may go in, Sounding with the Sounding-Pole.

Foſs of Caen.

Cape Schierbrough. From *Seynhead* to *Cape de Barfleur*, or *Cape de Schierbrough*, the Courſe is Weſt and by North 19 Leagues. About four Leagues to the Eaſtwards of it lie the Iſlands of St. *Marques*, Men may Sail round about them, but it is not there very clean.

S. Marcus La Honge. A League to the Weſtwards of the Iſland of St. *Marcus* lyeth *La Honge* a flat Tower; to the Weſtwards of it lyeth the Point of *Barfleur*, betwixt both is a great Bay, where Men may lie in 6 or 7 Fathom Land-lock'd for a North Northweſt wind. A Northeaſt wind bloweth there open in.

From

From the North Point of *C. de Barfleur* (which lyeth North Northweſt from you when you lie in the Road) lyeth off a Bank or little Riff, yet a Ship may go over it. Northeaſt a League and a half off from the foreſaid Point lyeth a Rock under water, where Ships may not go over. *Sunken-Rock.*

From *C. de Barfleur* to *Schierbrough* it is Northweſt and by Weſt 4 Leagues, that is a little Tide-Haven. To the Weſtwards of the Point of *Barfleur* lie ſome foul Grounds, if you keep the high Land of *Schierbrough* without the *Cape de Wyck*, you ſhall not come too near them. *Cape de Wyck.*

Before *Cape de Wyck* is a good Road in 6 Fathom, a little to the Eaſtwards of the 2 high Rocks in a Sand-Bay.

Before *Schierbrough* lie ſome Rocks or little Iſlands, which are clean round about; to the Weſtwards of it lyeth a Tide-Haven, called the *Foſs* of *Moberille*, before it on both ſides lie 4 or 5 high Rocks, at high water Men run through betwixt them, and ſo into the Haven. A great League and a half to the Weſtwards of it lyeth *Cape de Hague.*

Two Leagues Weſt and by North from *Cape de Hague* lyeth the Iſland *Aldernay* or *Ornay*, betwixt them goeth the Race of *Blankert* through. *Cape de Hague.*

The Coaſt of England.

THe Point of *Dongie Neſs* lyeth diſtant from *Dover* South W. and by W. 8 Leagues. At the E. ſide of the *Neſs* in *Romans Bay*, thwart of the *Romans-Tower*, is a good Road for Weſt, and Southweſt winds: For to Ankor there, run ſo far in the Bay, that the Point of the *Neſs* be South, and South and by Weſt from you; Ankor there in about 7 or 8 Fathom; you may alſo Ankor on the Weſt ſide of the *Neſs*, for a Northeaſt wind, ſo that the Point lie Eaſt and by North from you. *Road under the Neſs.*

For

For to Sail into the Camber of *Rie*, coming from the Weſt, you muſt keep *Beachy* without the Point of *Fairlee*, and run ſo towards the *Neſs*; and being come in fair by it, run in without 2 Cables length along by it unto the end of the *Neſs*, then edge up to the Weſtwards, and leave the Beacons on the Starboard ſide, nntil you come before the Caſtle *Camber*, that ſtandeth upon the Southern Chindle, there you may Ankor in 4 and 5 Fathom: From thence along even unto the Town of *Rye*, it is all ſet with Beacons, which ſtand along by the Eaſt ſide of the Deep unto the *Daries*, which at low water fall dry. In Sailing unto *Rye*, you muſt leave all the Beacons unto the Starboard ſide, and run indifferent cloſe along by them.

Road under the Beachy. The Point of the *Neſs* and *Beachy* lie Weſt Southweſt, and Eaſt Northeaſt diſtant 7 Leagues. *Beachy* is by the 7 white *Cleeves*, the beſt known Land that a Man can ſee any where. To the Eaſtwards of *Beachy* Men may Ankor for Weſterly winds in 6 or 7 Fathom, ſo that the Point be South, and South and by Weſt from you.

Of the Tides and Courſes of the Streams.

BEfore *Calice* and *Blackneſs*, the Flood falleth firſt 1 quarter to the Land, afterwards North Northeaſt.

Betwixt *Blackneſs* and *Bulleyn*, the Flood falleth North and by Eaſt by the Land; but a Sea-board in the *Offing* Northeaſt. A South and Southeaſt Moon maketh there the higheſt water.

Betwixt *Bulleyn*, *Diep*, and before the *Somme*, the Flood falleth firſt 1 quarter to the Land; afterwards Northeaſt and by Eaſt, and the Ebb Southweſt and by Weſt.

Betwixt *Diep* and the *Struyſaert* without the Land in the fair way, the Flood falleth Northeaſt and by Eaſt, and the Ebb Southweſt and by Weſt.

At

At *New-Haven*, and in the River of *Roan* a Southeaſt Moon maketh a high water.

From *Struyſaert* to *Caen* in the *Foſs*, the Flood falleth South Southweſt, and the Ebb North Northeaſt.

Before the Haven of *Caen* a South Southeaſt Moon maketh high water, within the Haven, a South and by Eaſt Moon.

At *Markel*, *la Honge*, *Barfleur*, *Sherbrough*, and *Cape de Hague* by the Shore, a South and by Eaſt Moon.

From *Seynhead* to *Barfleur*, the Flood falleth by the Land Eaſt and by North, and the Ebb Weſt and by South. But in the Channel a Sea-board the Land, the Flood falleth away Eaſt Northeaſt, and the Ebb Weſt Southweſt.

At *Cape de Hague* by the ſhore, a South and by Eaſt Moon maketh high water.

In the Race of *Blankert*, a North and by Eaſt, and South and by Weſt Moon. The Flood falleth through the Race Northeaſt, and the Ebb Southweſt.

In the midſt betwixt the Heads a Southweſt Moon.

At *Dover* a South and North Moon.

Betwixt *Dover* and *Dongie Neſs*, and likewiſe thwart of the *Neſs* a South Southweſt Moon maketh full Sea.

In the Channel of *Winchelſey*, a South and by Eaſt Moon.

At *Beachy* by the ſhore, a South Southeaſt, and North Northweſt Moon.

In the fair way thwart of it, a South and North Moon.

From *Dongie Neſs* to *Dover*, the Flood falleth Northeaſt and by Eaſt, and the Ebb Southweſt and by Weſt.

From *Beachy* to the *Neſs*, Eaſt Northeaſt, and Weſt Southweſt.

At *Beachy* by the Shore before the 7 *Cloves*, the Floud falleth Eaſt and by South, and the Ebb Weſt and by North.

Of the Depths.

Calice Cliff and the South *Foreland*, or the Point of *Dover*, you may ſee when you are before them in 24 Fathom.

To the Southwards of the *Oldman*, or *Tour d'ordre*, lyeth the high Land of *Eaſtaples*, which is very good to be known, becauſe thereabouts is no Land ſo high. When that is North Northeaſt from you, and you be thwart of the *Somme*, it is there deep 8 and 9 Fathom.

Upon the Land of *Somme* towards *Diep*, ſtand many ſharp Towers, and ſome Mills and Trees, and hath all along the Coaſt a Sandy Strand.

Before *Diep*, Men may ſee the Land in 20 and 22 Fathom.

About 4 Leagues without *Struyſaert* it is deep 20 Fathom.

Between *Diep* and *Seynhead* ſtand alſo many ſharp Towers, Trees, and Houſes upon the Land; *Struyſaert* is beſt to be known on a great Rock like a high Tower, thwart of it in the fair way it is deep 16 and 17 Fathom.

About *C. de Barfleur* and *Sherbrough*, 4 Leagues from the Iſland, it is deep 30 Fathom.

Barfleur is a high Point; below upon the white Land ſtandeth a flat Tower, 2 Mills, and ſome little Houſes, and to the Weſtwards of it is more white Land.

Upon *Cape de Hague* ſtandeth a Caſtle, with a little Turret; a little to the Eaſtwards of it in the Land ſtandeth a ſharp Tower. Two Leagues to the Eaſtwards of it lyeth *Sherbrough* with a flat Steeple.

Betwixt *Winchelſey* and *Picardy* in the midſt of the Channel it is deep 26 and 27 Fathom; upon ſuch Depth Men may ſee *Fayerly* and the Land of *Dover*.

Without *Beachy* thwart of the 7 *Cleeves* it is deep 28 and 29 Fathom.

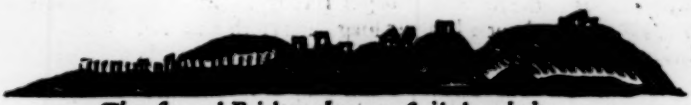
For

For to know the Courſes and Diſtances from place to place. See the Pilots Sea-Mirrour, *in* pag. 32, 33.

Of the Latitudes.

The *Heads* and *Dover* lie in	51 *degr.* 12 *min.*
The *Somme* lyeth in	50 *degr.* 6 *min.*
The Point of *Struyſaert* in	49 *degr.* 35 *min.*
Beachy lyeth in	50 *degr.* 50 *min.*

How theſe Lands do ſhew themſelves at Sea:



Thus ſheweth Fairley *when you Sail along by it.*

VI Demonstration,

Wherein

Is Deciphered the Coasts of Britanny, *from the Island of* Ornay, *to the Island of* Ushant.

Cape de Hague. *Ornay.* *The Race of Blankert.*

TWo Leagues West and by North from *Cape de Hague*, lyeth the Island *Aldernay* or *Ornay*, betwixt them goeth the Race of *Blankert* through. *Aldernay* or *Ornay* is about 3 Leagues long, and lyeth East and West. The East end is clean; Men may Sail reasonable close along by it, but the West end is very foul: There lie some little Islands close by the West end; being past them, Men may Sail towards *Jarsey* without any fear.

To the Southwards of the foresaid little Islands, at the West end lyeth off a ledge of Rocks within it; On the South side it is clean, except at the South Point, that is also foul. He that will Ankor on the South side of *Ornay*, must be mindful thereof, and Ankor a little to the Eastwards of the Tide-Haven.

From the West end of *Ornay* lyeth a great multitude of Rocks West and by North, and West Northwest off 3 Leagues into the Sea.

Upon the outermost and Westermost end, lyeth a great high Rock, with many other smaller Rocks about it. Half ways betwixt this great Rock and *Ornay* lyeth another great Rock, but not so high as the foresaid Westermost; from it lie off a multitude of Rocks towards the outermost, which fall dry at low water, but at high water many lie under water. These 2 great Rocks are called by the French, *Les Casquets*, and by the Dutch, *Caskets.*

the

the *Kiskaſſen*, and by the Engliſh, the *Caskets*. Cloſe by the Weſt end of *Ornay*, towards the *Caskets*, lie other 2 great rans of Rocks, called the *Baroches*. *Baroches.*

From the Eaſt Point of *Ornay*, to the E. end of *Garnſey* (about to the Southwards of *Ornay*,) the Courſe is W. S. weſt 9 Leag. but from the *Caskets* to the Weſt end of *Garnſey* Southweſt and by South 6 Leagues.

If you will Ankor under *Garnſey* (coming from the *Caskets*) then run on to the Northeaſt Point of *Garnſey*, and ſo far to the Eaſtwards of it, until you get ſight of the Caſtle that ſtandeth upon the Rock on the Eaſt ſide of *Garnſey*. Of if you come about to the Weſtwards of the *Caskets*, then go on Southeaſt, or ſomewhat more Southerly, until the Northeaſt Point of *Garnſey* be South and by Weſt from you, Sail then towards it, till you ſhall come in ſight of that foreſaid Caſtle upon the Rock. Bring that over the South Point of *Garnſey*, and Sail in upon that Mark, betwixt the Iſland *Arem* or *Harm*, and *Garnſey*, untill you come by the foreſaid Caſtle; betwixt theſe Iſlands it is on both ſides full of Rocks, whereof you muſt take good heed, eſpecially on the Larboard ſide towards *Arem*; when you are come by the Caſtle, you may Ankor within or without it, where you pleaſe, without the Caſtle in 12 or 13 Fathom, or within the Caſtle (that is betwixt the Caſtle and *Garnſey*) in 6 or 7 Fathom at low water. It doth flow there 6 or 7 Fathom up and down, which Men muſt reckon upon. *Road under* Garnſey.

Under the South ſide of *Garnſey*, Men may ride for Northweſt, North, and Northeaſt winds. If you come from the Weſt, or from the *Caskets*, you muſt run cloſe about by the Southweſt Point, called *C. de Gruſe*; and along by the South ſide of the Iſland, well half ways the Iſland, and Ankor there where you think good, in 18 or 19 Fathom. If the wind ſhift to the Southweſt, or to the Weſt Southweſt, then you may run about by the S. Point unto the foreſaid Caſtle, and Ankor there, either without or within it, as here before is ſaid. From the aforeſaid South Point, lyeth off a little ledge of Rocks, whereof ſome Rocks lie above, and ſome under water; theſe you muſt avoid when you Sail about by it.

South

South and by Weſt, and South Southweſt about 8 Leagues from *Garnſey* lyeth a great ledge of Rocks, more than a great League called *Rockeduves*.

Rockeduves

About 2 Leagues Southeaſt from *Garnſey*, lyeth the Iſland *Sark*, there Men may Ankor round about it in 25, 26, and 27 Fathom. From the North end lie off ſome Rocks, whereof ſome lie above, and ſome under water. At the South end hereof lie alſo ſome Rocks, but all above water.

Sark.

Betwixt *Garnſey* and *Sark* lie 2 other little Iſlands, *Arck* and *Arem*, or *Harm*; there Men may Sail through betwixt them.

Ark and Arem.

The Iſland *Jarſey* from *Garnſey* Southeaſt, diſtant 7 Leagues; round about this Iſland are good Roads at divers places. All along the North ſide Men may Ankor in 10 and 11 Fathom. At the ſame North ſide, ſomewhat within the Weſt Point, lie ſome great Rocks a good ways off from the ſhore, called the *Pater Noſters*, or *Pierreleg*. At the S.weſt Point lie many Rocks which lie off a great ways into the Sea, to the Northwards of them, *viz.* betwixt them and the Weſtermoſt Point; at the Weſt ſide of *Jarſey* Men may Ankor at divers places in 10, 11, and 12 Fathom. At the South ſide of *Jarſey* is alſo a good Road for a Northweſt, and Weſt Northweſt winds. At the Eaſt ſide lyeth S. *Katherines* Bay, there is alſo very good Roads for Weſterly winds.

Pater noſter.

S. Katherines Bay.

The Weſt end of *Jarſey* and St. *Maloes*, or the Iſland *Siſember*, before S. *Maloes* lie South and by Eaſt, and North and by Weſt 8 or 9 Leagues aſunder. About half way betwixt both right in the fair way, lie a great number of high Rocks together, which contain in Circuit in Sailing, about 7 or 8 Leagues, called the *Mankiers*, they lie far towards *Jarſey*, ſome above, and many under water, ſo that it is not without great danger to run through betwixt *Jarſey* and the *Mankiers*.

Mankiers Rocks.

When Men will Sail through the Race of *Blankaert*, bound for S. *Maloes*, they run commonly through betwixt *Sark* and *Jarſey*, may alſo Sail to the Eaſtwards of all the Iſlands and Shoalds along the Coaſt of *Normandy*, towards St. *Maloes*, in manner as followeth.

When

When Men come a little paſt *C. Voorha*, they ſhall meet (thwart of the Iſland *Jarſey*) with 3 or 4 high Rocks, called *Le Beuf*, Men may run to the Weſtwards of them, and ſo through betwixt them and the Iſland *Jarſey*, or elſe to the Eaſtwards of them along by the main-Land, even as they will, towards the Riff of *Mortefaim*, that lyeth upon the Coaſt of *Normandy* South Southeaſt, 8 Leagues from *C. de Voorha*. *Le Beuf.*

Over againſt, or thwart of the Riff of *Mortefaim*, lyeth a rane of Rocks lying Eaſt and Weſt, more than a League in length, called *Beufkin*, at the Eaſt end many of them lie above, and at the Weſt end moſt of them lie under water. Men muſt Sail through betwixt them and the Riff of *Mortefaim*, that are bound for *Granvile*. *Beufkin.*

Betwixt the foreſaid Rocks *Beuf* and *Beufkin*, lyeth another great ran of Rocks called *Eckerof*, which lie off from the South-eaſt Point of *Jarſey* towards *Granville*; you muſt leave all theſe Rocks on the Starboard ſide, and run along to the Eaſtwards of them. *Eckerof.*

From the Riff of *Mortefaim* to *Granville*, the Courſe is South Southeaſt, and from *Bufkin* Southeaſt 4 Leagues.

Cape de Voorha and *Granville* are 2 Points that lie without the other Land, About the South Point of *Granville* lie 2 or 3 little Rocks; along by them Men muſt run in within a Pier or Head, where the Ships lie dry at low water. Betwixt *Cape de Hague*, and *Granville*, Men may ſee upon the Land many little Houſes, Mills, and Trees, as they Sail along by it. A little to the Southwards of the Riff *Mortefaim*, ſtands a Church with 2 Steeples, called *Quotanſe*. All along this whole Coaſt is every where good Ankorage in 6 or 7 Fathom, eſpecially a little to the Southwards of *Cape de Hague*. *Granville.*

About 2 Leagues Weſt from the Point of *Granville* lyeth another great rane of Rocks, 2 great Leagues long, lying Eaſt and Weſt. called *La Shauſee*; betwixt them and the Point of *Granville* Men muſt Sail through that are bound for *Concalle*, or S. *Maloes*. *La Shauſee*

About 5 Leagues to the Southwards of *Granville*, in a great Bay, lyeth an Iſland before the River of *Avrantie*, about a League

League without the Land, called *Mount de S. Michael*, upon it
Mount de S. Michael lyeth a Caſtle, or little Town called S. *Michael*, with a high Tower which Men may ſee at Sea. This Bay is to the Southwards of *Granville*, within the Rocks of *Concalle*, very flat and riſing Ground, from 13, 10, 8, 6, and 4 Fathom to 1 Fathom, ſo that at low water the Bay falleth ſo far dry, that from the Strand Men ſee not Sea nor water.

Concalle. From *Granville*, to the Point of *Concalle*, the Courſe is S.weſt 5 *l.* from that E.wards lie 3 Rocks, under which Men may Ankor in 10 Fathom. For to Sail to the Town, Men muſt run in betwixt the Point and the foreſaid Rocks. It is betwixt them both 8 and 9 Fathom deep. Before the Town it is ſhoaldier water. To the Northwards of the Town lie other 2 Rocks, there Men may alſo Ankor under in 5 and 6 Fathom water.

From the outermoſt Rocks by the Point of *Concalle*, until you come before S. *Malves*, the Courſe is Weſt, and Weſt and by South 5 Leagues.

S. *Malots.* Before the Haven of S *Maloes*, lyeth an Iſland called *Si-*
Siſember. *ſember*; upon the Weſt end thereof ſtandeth a Mill, and upon the Eaſt end a Church, with ſome little Houſes, being a Friery; coming out of the Sea, you can but even ſcarce ſee the Church; but being within the Iſland you may ſee it better, becauſe it ſtandeth on the South ſide of the Iſland. A great ſhot of a caſt Piece to the Eaſtwards of *Siſember*, lyeth a great high Rock,
Mewſtone. called the *Mewſtone*: betwixt them and *Siſember* it is all full of Rocks and Stones, which at high water lie moſt under water: there is a little Channel betwixt them both, which the *Frenchmen* uſe with their ſmall Shipping, through betwixt the Rocks, but is not to be uſed with great Shipping, neither by them that are not very well acquainted with it.

Betwixt the *Mewſtone*, and ſome other Rocks to the Eaſtwards of it, lyeth a Channel South, and South and by Eaſt,
La Congie called *la Congie*. For to Sail in there, you muſt run in cloſe aboard to the E.wards of the *Mewſtone*, S.eaſt and by Eaſt right in with the Town, until you be gotten in 2 third parts of the diſtance (between the *Mewſtone* and the Town) from the *Mewſtone*, and are one third part of the diſtance from the Town; that

that is, when the *Menſtone* is twice ſo far from you as the Town, then you ſhall ſee by the Northweſt Point of the Town, 2 great Rocks, about a caſt Piece ſhot from the foreſaid Point; upon each Rock ſtandeth a little Houſe, the outermoſt is the ſmalleſt, and is called the little *Bee*; the neareſt to the Town is the greateſt, and is called the great *Bee*, Sail then towards them, and run in about them within a Cables length of them, but keep that Courſe ſo long, untill that the little Tower (that ſtandeth a little to the Southwards of the Town upon the Point) come over the Tower of *Bore* a little to the Eaſtwards of *Saledour*, keep them one over the other, and Sail ſo in, unto the South end of the Town, where the Mills do ſtand, then you ſhall ſee there upon the Rocks 2 Beacons, run betwixt them through at high water, until you come within the Town at the Eaſt ſide; the Ships lie Moored with 4 Cables, dry at low water, 2 faſt on the Town, and 2 upon the Sand. Betwixt theſe 2 foreſaid Beacons to the Southwards of the Town, and thereabouts, is the Ground ſharp, Rockie, and Stony, therefore Men muſt take heed not to ſtay there at low water, or to ground there; but within on the Eaſt ſide of the Town, it is clean Sandy Ground, there may the Ships lie a ground without danger. *The little and great Bee.*

A little within, or to the Southwards of the foreſaid Rock, the little *Bee*, Men may Ankor in 5 or 6 Fathom water at low water, ſo that the Tower of *Bore* cometh little to the Eaſtwards of the lsttle Tower upon the Point to the Southwards of the Town; that Road is called by the French *La Ranſe*, there Men commonly firſt Ankor, and ſtay for high water, for to go in about to the Southwards of the Town. It floweth here at S. *Maloes*, and thereabouts, 7 Fathom up and down with an ordinary Tide. *The Road La Ranſe.*

From the Weſt end of *Siſember*, lie off alſo a great many Rocks along to the Weſtwards, more than a great ſhot of a caſt Piece, at the end of them goeth in the Weſtern-Channel of S. *Maloes*, Eaſt and by North in. For to Sail in there, you muſt look out for a ſharp little Tower, that lyeth ſomewhat to the Northwards, or to the Eaſtwards of S. *Maloes*, within the Land called *Pelemy*; when you have brought that Eaſt and by

North from you, then you ſhall ſee upon the ſhore right againſt it, a great black Rock, which for Blackneſs ſheweth it ſelf without all the other Rocks thereabout, and thereby is very eaſie to be known: Bring that Rock and the foreſaid little Tower one to the other, and Sail ſo right in until you come thwart of the Iſland *Siſember*, or elſe that the little Tower (upon the Point to the Southwards of the Town) come to the Tower of *Bore*, to the Eaſtwards of *Saledoor*, Sail then towards the Road of *La Ranſe*, to the Southwards of the little *Bee*; or elſe if it be high water, you may run in upon the Marks, and then in about to the Southwards of the Town, as here before is ſaid.

When you Sail into this Weſtern Channel, you ſhall leave on the Starboard ſide a high Rock (called the *Schoorſteen*) with more other Rocks to the Weſtwards of it, which at high water are moſt of them over-flown. On the North ſide, that is, on the Larboard ſide, lie alſo many Rocks, whereof many of them are over-flown at high water, and alſo many remain above water.

More a Southern channel.

Yet a Southern Channel lyeth in by the Land to the Southwards of the Rock of S. *Anthony*, upon Marks that Men may ſee a Stearn the Ship, but it is not uſed but with ſmall Ships.

Stony-Bank.

About half ways betwixt the Weſtern Channel of S. *Maloes*, and *C. de Farela*, lyeth a ſtony Bank under water. A little to the Weſtwards of *C. de Farela*, lyeth a great Rock. When you will Sail from *C. de farela* towards S. *Maloes*, and that you keep the foreſaid Rock right upon the Point of *Farela*, you ſhall ſo (without fail) Sail apon the Stone-bank: but if you keep the Rock hidden under or behind the Point, then you ſhall Sail along to the Southwards of it; Or elſe if you keep it without the Point (ſo that you may ſee through betwixt it and the Point) then you ſhall Sail along to the Northwards of it The foreſaid Rock is a good Mark for to know *Cape de farela* by.

Four Leagues Weſt from St. *Maloes* lyeth a great Sand-bay, where Men may lie Land-lockt for all winds: Men uſe to Ankor within a great Rock, right againſt a Mill, and ſome Trees.

About

About 2 Leagues Northweſt from that Sand-bay lyeth the *Cape de Farela*, which is alſo called *Cape de Late*, after the Caſtle *de Late*, that ſtandeth to the Eaſtwards of the Point, there is a good Road for Weſt and Southweſt winds. C. *Farela*

Two great Leagues Northweſt from the entry of the Haven of S. *Malots*, lyeth the *Oyſter-bank*, there under it Men may Ankor in 6 or 7 Fathom. *Oyſterbank*

To the Weſtwards of *Cape de Farela* unto the North end of the Iſland *Briack*, the Courſe is Weſt and by North 9 or 10 Leagues. Two Leagues from the Land Weſt from the Cape, lyeth a great ran of Rocks above water. Between the foreſaid Cape, and the Iſland *Briack*, lie the Havens or Rivers of St. *Brieux*, and St. *Benit*. *Briack*

The Iſland *Briack* is 2 Leagues long, and lyeth South South-weſt, and N. Northeaſt, when you come from the E. you ſhall ſee 2 Mills upon it, and betwixt them a high round Hill, with a little Houſe upon it: you may Sail round about this Iſland, and may make Roads on every ſide where you will, although round about it here and there lie ſome Rocks, yet it is all over good Ankor-ground, A good ways off from the Northeaſt Point lyeth a Rock called *Souff*, and at the North end lyeth a Ledge of Rocks under water, whereof you muſt take heed. S. *Brieux.* & S. *Benet.*

A great League Weſt Southweſt from *Briack*, three or 4 Leagues a Sea-board the Land, lie the out-Rocks, called the *Pickeles*, Men may Sail round about them alſo; but to the Eaſtwards of them towards the main Land, lie many ſunken Rocks.

Four Leagues to the Weſtwards of *Briack*, lyeth the *Port-Blank* upon a great River, called *Lantrilliers*; to the Eaſt wards of this Haven lie off many out-Rocks. *Port-blank* *Lantrilliers*

To the Weſtwards of *Port-Blank*, lie the *Sept Iſles*, or Seven Iſlands, lying from the *Pickels* diſtant 5 Leagues, Eaſt and Weſt. A League to the Southwards of them lyeth the *Green-land*, there you may ride round about it. Between the Seven Iſlands you may not Sail through, but to the Southwards of them; betwixt them and the *Green-Iſland* goeth a broad Channel through. From the Eaſtermoſt Iſland lyeth off a foul Riff to the Southwards, upon the outermoſt end of that Riff lyeth *Seven-Iſles* *Green-Iſland.*

a Rock, as a good Mark to Sail about the Riff. Northweſt upon the Weſt end of the Seven Iſlands, lyeth alſo a ſunken Rock, which at low water may be ſeen. Men may alſo Sail along by the Coaſt from *Port-blank*, within to the Southwards of the *Green Iſland*, and come out again into the Sea to the Weſtwards: from thence Northweſt off into the Sea, lie the 7 *Triacle Pots*, theſe are great fearful out-Rocks, which lie ſpread wide and broad Weſt Southweſt from the Seven Iſlands, and 4 or 5 Leagues a Sea-board the Land.

Triacle pots

Betwixt the *Triacle Pots* and the Seven Iſlands lyeth the River of *Lamiuoe*, to the Weſtwards of the *Green Iſland*: For to Sail in there, Men muſt take good heed of the Northeaſt Point, which is foul

R. Laminoe

Thwart of the Seven Iſlands upon the main Land, ſtandeth a Church with a high Steeple, called *Our Lady of the Clearneſs*, thereby Men may know them.

Thwart of the *Triacle Pots* ſtandeth alſo a high Tower, thereby Men may know when they are near them, but it muſt be very clear weather, before Men can well diſcern it upon the Land.

He that cometh by Night or dark weather from the *Fourn*, or *Uſhant*, and is bound to S. *Maloes*, let him not go with a Southerly wind, to the Eaſtwards of Eaſt Northeaſt, or Northeaſt and by Eaſt with a Weſterly wind, ſo long until he hath the length of the *Triacle Pots*, that they be on his broad ſide. The Floud falleth Southeaſt within the *Triacle pots*, and the Seven Iſlands, and ſhould by Night eaſily draw a Ship towards them. By Day, or when there is ſight, there is no ſuch danger.

Within the *Triacle pots* lyeth the Tide-Haven of S. *John de Day*, two Leagues to the Weſtwards of the *Green Iſland*, and 2 Leagues to the Eaſtwards of *Morlions*, Men may Sail from thence through the Rocks unto *Morlions*, and Ankor in 5 or 6 Fathom at low water.

To the Weſtwards of the *Triacle pots* lyeth a great Rock, the Eaſtern entry of *Morlions* lyeth from it Southweſt and by South, diſtant 2 Leagues; but the Weſtern entry lyeth from it

Morlions.

Weſt

Weſt Southweſt, and Weſt and by South 4 or 5 Leagues, that goeth in by a great long ragged Rock. This entry Men may Sail in South, and South and by Weſt unto the Caſtle of *Morlaix*; being about the Caſtle, they may run through the Rocks again to the Eaſtwards, aod run out again at the Eaſtern entry North Northeaſt, and North and by Eaſt into the Sea, according as the Tide ſhall be: the Flood cometh there out of the Northweſt. *Morlaix.*

If a Man would go from *Morlaix* to *Morlions*, he may go on Eaſt through the Rocks, and ſo Sail to it: It is all broken Land, and there remaineth at low water 5 Fathom depth.

If you are bound to S. *Paul de Lion*, you muſt run right with the great Rock, with the 2 Horns or Saddle, and ſo cloſe along by it: being paſt it, edge to the Land; upon the Strand lyeth a Village, called *Plempoll*, Sail right with it, aud along by it, to the Eaſtwards of it goeth in the River. Theſe are all Tide-Havens, but betwixt the Rocks of the *Morlions*, and the Iſlands Bay, it is at low water deep enough for to ſave a Ship. S. Paul *de Lion.*

The Land of S. *Paul de Lion* is double Land, upon S. *Pauls* Church ſtand 2 ſharp Steeples. The Iſland *Iſle de Bas*, lyeth thwart before it, upon it ſtandeth 2 Stakes, to ſee too a far off like Mills. Upon the Eaſt end of that Iſland lyeth a very high ragged Rock, when you are to the Eaſtwards of this Rock, you ſhall ſee 2 ſharp Steeples a little one from the other, theſe are the Steeples of *Plempolle*: you may alſo then ſee the Caſtle of *Morlaix*, lying Southeaſt from you upon a high Rock. *Iſle de Bas.*

The foreſaid outermoſt long ragged Rock of *Morlaix*, lyeth from the top of the Iſland *Iſle de Bas*, Eaſt, and Eaſt and by South 3 or 4 Leagues. Men may Sail along by the main Land within, and through theſe Rocks, until they come to the Seven Iſlands; they are all great Bays, where in moſt places is good Ankor-ground.

Five great Leagues North and by Eaſt of *Iſle Bas*, and Southweſt and by Weſt 27 Leagues: From the *Caskets* lyeth a dangerous Rock or Cliff called *Roche Blanche*, and lyeth from Seven Iſlands Weſt Northweſt 9 Leagues. *Roche Blanche.*

Within

Roskow. Within the *Iſle de Bas* lyeth the Town of *Roskow*, you may Sail into the Haven of *Roskow* on both ſides of the Iſland.

For to Sail into the Eaſtern Channel, when you are paſſed by the high Rock with the Saddle, or 2 Horns, called *Le Tanrean*, and come by the Land, betwixt the Eaſt Point of the Iſland, and the Point of the main Land over againſtit; you muſt Sail ſtill keeping the middle of the Channel. It is in this Channel 7 and 8 Fathom deep. Being come within the Point of the Iſland, you muſt run in about by it Weſt and by South, and Weſt on, until you come about half ways within the Iſland, and Ankor there in 8 or 9 Fathom. And then *Roskow* ſhall lie South, and South and by Eaſt from you.

If you will Sail into the Weſtern Channel, you ſhall ſee to the Weſtwards of it, cloſe by the main Land 2 great long Rocks. From the Point of the main Land, a little to the Eaſtwards of the Eaſtermoſt long Rock lyeth off a Riff from the Land, which maketh the Weſt ſide of the Channel; you muſt run in South-eaſt betwixt that Riff and the Weſt Point of the Iſland, and when you come within the Point of the Iſland, you muſt edge up Northeaſt unto the midſt of the Iſland, and Ankor there, as here before is ſaid.

From *Iſle de Bas* along to the *Fourn* or *Uſhant*, lyeth the Coaſt Weſt Southweſt 16 Leagues.

From the Iſland *Iſle de Bas* unto the *Fourne*, (the outermoſt or Weſtermoſt end of the main Land of *Britain*) the Courſe is Weſt Southweſt, and Weſt and by South 13 Leagues. About half ways betwixt them both lyeth *Obverack*, or *Abberwrack*.

Abberwrack. About a League Northweſt without the Rocks of *Obverack* or *Abberwrack*, lyeth a ran of Rocks under water. They that by Night will ſail or turn to windwards from the *Fourn* or towards the *Fourn*, let them not come thereabouts nearer the Land than in 45 Fathom.

The Fourns A League to the Eaſtwards of the *Fourn*, and all along the Coaſt even unto the *Fourn*, lie many long black ragged Rocks, in many places appearing like Villages, theſe are called the *Ovens*, within them on the main Land (which is not very high) Men ſhall ſee (ſailing along by them) many white Sand-Bays, and

and here and there ſome little Houſes, whereby the foreſaid Land thereabout is very eaſie to be known.

The *Fourn* and *Uſhant* lie Weſt Southweſt, and Eaſt Northeaſt diſtant 2 great Leagues. *Uſhant* ſheweth it ſelf at Sea at the South end low, and at the North end going up ſloaping; upon the midſt of it ſtandeth a little flat Tower, by which Marks it is good to be known.

Of the Tides and Courſes of the Streams.

AT *Cape de Hague* by the ſhore, a South and by Eaſt Moon maketh high water.

In the Race of *Blackert* a North and by Eaſt, and South and by Weſt Moon. The Flood falleth through the Race Northeaſt, and the Ebb Southweſt.

In the Iſlands alſo a North and by Eaſt, and South and by Weſt Moon maketh a full Sea, Men cannot well reckon the Tides there: becauſe they have divers Courſes about the Iſlands, but for the moſt part Northeaſt and by North. A quarter of the Tide, the Flood falleth thwart into the *Caskets*.

In *Garnſey* a North and by Eaſt, and South and by Weſt Moon maketh full Sea.

At *Concalle* and *Granville* a Weſt Northweſt Moon.

At S, *Maloes* an Eaſt and Weſt Moon maketh high water. The Flood falleth in there at the Weſtern Channel, and goeth out again at the Eaſtern Channel; Men muſt reckon there upon when they will Sail into theſe Channels.

From the Iſland *Briack* in the Bay of *Benit*, the Flood falleth Southeaſt, but in the fair way Eaſt Southeaſt, and Weſt Northweſt.

At the Eaſt ſide of the Iſland *Briack* in the Road South South E. An Eaſt and Weſt Moon maketh there the higheſt water.

Betwixt

Betwixt the Iſland *Briack* and *Garnſey*, a Weſt South w. Moon maketh full Sea, the Flood runneth there Eaſt South E. and the Ebb Weſt North w.

On the Coaſt, and within the *Caskets*, the Tide runs continually againſt the Sun, ſo that it is there never ſtill water.

Betwixt *Sept Iſles*, or the Seven Iſlands, and *Garnſey* in the fair way, a Weſt South w. Moon maketh full Sea.

Betwixt *Briack* and the Seven Iſlands, an Eaſt and by North, and W. and by South Moon maketh full Sea. The Flood filleth there E. and E. and by South.

Betwixt the Seven Iſland and the outer Rocks of *Morlions*, the Flood falleth in South E. within the *Triacle Pots* towards the *Green-Iſland*, but in the fair way in the *Offing*, Eaſt, and E. and by North.

At *Morlaix* and S. *Pauls* a W. and by South Moon maketh the higheſt water: but in the fair way in the *Offing* thwart of it, a South w. and by W. and W. South w. Moon.

At the *Iſle de Bas* maketh high water a Weſt and by South Moon.

In the fair way there in the *Offing*, the Flood falleth Eaſt Northeaſt, and the Ebb Weſt Southweſt; and ſo likewiſe from thence all along the Coaſt of *Brittaign*, unto the *Fourn* or *Uſhant*.

At *Abberwrack*, an Eaſt Northeaſt, and Weſt Southweſt Moon maketh full Sea, without *Uſhant* a Weſt Southweſt, and Eaſt Northeaſt Moon, and within the Trade a Southweſt and by Weſt Moon maketh full Sea.

Of the Depths about theſe places, and in what Depths Men may ſee the Land.

UPon *Cape de Hague* ſtandeth a Caſtle, with a little Turret; a little to the Eaſtwards of it in the Land ſtandeth a ſharp Tower. Two Leagues to the Eaſtwards of it lyeth *Sherbrough* with a flat Steeple.

The Iſland *Ornay* is upon the Weſt end high with a ſteep going down Point: the Eaſt end is hilly, or with Hommocks, but lower than the Weſt end; in Sailing by it, Men may ſee upon it a Tower or two with ſome Mills. Upon the North ſide of the Iſland lyeth a white Hill like a Sand-Hill.

To the Northwards of the *Caskets*, two Leagues from Land is deep 35 and 40 Fathom.

Betwixt the *Caskets* and *Garnſey* is 35 and 40 Fathom deep, moſt all ſtony Ground.

Northweſt about 4 Leagues from *Garnſey* is a Pit where it is 80 or 90 Fathom deep; elſe it is there abouts 40 Fathom.

Betwixt *Ornay* and *Jarſey* is is deep 20 and 25 Fathom.

In the fair way of *Jarſey*, *Rockduve*, and the Iſland *Briack*, it is deep 20 and 30 Fathom.

About the *Triacle-pots* along the Coaſt it is 45 and 50 Fathom deep, in ſuch depths Men may ſee the Land thereabouts.

By Night it is not good to come nearer that Coaſt, and the ſeven Iſlands than in 45 Fathom.

Thwart of S. *Paul de Lion*, and the Iſle de *Bas*, 5 Leagues from the Land it is deep 45 and 50 Fathom.

Thwart of *Abberwrack* 5 Leagues from the Land, it is deep 50 and 55 Fathom.

The *Backovens*, or the Land of the *Fourn*, Men may ſee in 50 Fathom.

Uſhant being about South from you, you may ſee in 50 Fathom.

For to know the Courſes and Diſtances from place to place. *See the* Pilots Sea-Mirrour, *in* pag. 30, 31.

Of the Latitudes.

The *Caskets* lie in	49 *deg.* 49 *min.*
The 7 Iſlands, or *Sept Iſles*	49 *deg.*
Uſhant lyeth in	48 *degr.* 30 *min.*

How theſe Lands do ſhew themſelves at Sea.

Thus ſheweth Garnſey, *when it is thwart from you about 4 Leagues.*

VII Demonstration,

Wherein

Are Delineated the Coaſts of England, *from* Beachy *to* Port-land.

TO the Weſtwards of the Point of *Beachy*, thwart of the Weſt end of the 7 *Cleeves*, right againſt the Chindle, where Men run along by into *New-haven*, Men may alſo Ankor in 7, 8, or 9 Fathom.

A League and a half to the Eaſtwards of the Point of *Beachy*, neareſt Eaſt Northeaſt from the Point lyeth a little Sand, upon which there is at low water and Spring-tides ſcarce 2 Fathom.

At the Weſt end of the *Seven Cleeves* lyeth the River of *Cuckmer-haven*, or *New-haven*, which hath two entries, the weſtermoſt entry lyeth in by the Weſt Land, but is not to be uſed, but only with very ſmall Shipping; It falleth altogether dry, the Eaſtermoſt is commonly the beſt, and lyeth Northweſt and by Weſt in; there is at high water with a common Tide no more than 7, and with a Spring-tide 14 or 15 Foot water; within, the Ships lie every Tide drie: But before the Village they remain a float; there they moor with 4 Cables faſt on two green Shores. Upon theſe entries Men cannot well make any reckoning, they keep no certain depth, when it bloweth a Storm out of the South, they are oftentimes caſt too with a Chindle, and opened again with a freſhut. *New-haven.*

Shorum is a Tide-haven, where is at high water and Spring tides 18 Foot water; but at low water, there remaineth no more than 3 Foot water, ſo that then it floweth 15 Foot up and down. With a common Tide at high water there is 12 Foot, and at low water 3 Foot depth. The Town *Shorum* lyeth a *Shorum.*

little Engliſh Mile within the Haven, Ships (that draw but 8 or 9 Foot water) can lie afloat a little beneath the town at low water, or elſe they lie dry every where.

When you come from the Eaſtwards from *Beachy* or *New-haven* along by the ſhore, yon may ſee open into the Haven, before you come thwart of it: But coming from the Weſtward, you ſhall not ſee it open before you come right before it, becauſe the Weſt Point lyeth ſomewhat further out than the Eaſt Point. From the Weſt Point runneth off a little Tail, but at high water you may run in along over it, otherwiſe you muſt run in by the Eaſt ſhore. Upon the Eaſt Point ſtand 2 Beacons, which you muſt bring one in the other, and run in ſo right with them until you come by the North ſhore, and then in along by the foreſaid North ſhore.

At *Shorum* ſometimes there are builded many great Ships of 300 or 400 Tuns.

Arundel About 6 Leagues to the Weſtwards of *New-haven* lyeth *Arundel*, a Tide-haven, where a Ship may go in at half Flood; you muſt go in there by the Weſt Land Northeaſt. In the entry it is 2, and betwixt the two Lands 3 Fathom deep at high water: But within the Haven remaineth at low water 4 and 5 Fathom; there you muſt Ankor before the Village.

Owers. Five Leagues Weſt South w. from *Arundel*, and 13 Leagues Weſt and by South ſomewhat weſterly from *Beachy*, lie the Banks or ſhoalds of the *Owers* under water, a great League and a half a Sea-board the Land.

Eaſt-brough-head. About 2 Leagues Eaſt Northeaſt ſomewhat Eaſterly from the South ſide of the *Owers*, and 2 little Leagues South from *Arundel*, lyeth a ſhoald of Rocks and Chindles, called *Eaſt-brough-head*, as great as an Acre of Land, which falleth (at low water and Spring-tides dry) otherwiſe it cometh not above water; cloſe to it, it is 15 Fathom deep. They that Sail off from the Haven of *Shorum*, and are bound to the Weſtwards, muſt not go more weſterly than South Southweſt, until they come in 12 Fathom, before they ſet their Courſe more weſterly, for fear of this ſhoald. About an Engliſh Mile N. W. from this foreſaid ſhoald lyeth alſo a ſunken Rock, whereupon at low water it is no more than 5 or 6 Foot water.

About.

About half ways betwixt *Arundel* and *Selſey*, runneth off a Ledge of Rocks thwart to the Southwards from the Shore, about an Engliſh Mile and a half into the Sea called the *Bogners*, whereof ſome of the Rocks fall dry at low water, but the outermoſt are always under water.

The ſhoalds or Banks of the *Owers*, lie about 4 Leagues to the Eaſtwards of *Wight*, and lie off a League and a half from the Land; thwart of them ſtandeth a Tower in the Land, when that is North Northweſt from you, then are you thwart of the Southermoſt part of the Shoald; and if you keep the *Culver-cliff* of *Wight* Weſt and by North, and Weſt Northweſt from you, coming either from the Eaſt or from the Weſt, you can take no hurt of the *Owers*, you may run along by them in 12 Fathom upon your Lead, without danger. If you Sail away from the E. end of *Wight*, E. and by N. and E. N. Eaſt. you ſhall run in 12 Fathom along over the Eaſt end of them. He that is there well acquainted, may alſo Sail to the Northwards of them, through between the Land and the *Owers*.

The Owers

Culver-cliff.

Betwixt the *Owers* and *Portſmouth* goeth a great Sound or Haven; within lyeth the Town of *Chicheſter*.

On both ſides of the Iſland *Wight* Men may Sail within it, and there come to Ankor either under S. *Ellens*, or before *Newport* where they will.

Chicheſter.

For to Sail into the Eaſtwards of *Wight*, you muſt bring the Eaſtern Caſtle that lyeth to the Eaſtwards of *Portſmouth*, over the *Lime-kiln* (that is, a white ſpot in the Land to the Northwards of that Caſtle,) and keep them ſo one over the other, until that the *Culver-cliff* come within, or under the N E Point of *Wight*. Then bring the *Lime-kiln* over the Eaſt end of *Portsmouth*, and keep them ſo until that the foreſaid Caſtle to the W. wards of *Portſmouth* come to the wood: thus doing, you ſhall come near neither Plate nor Sand to take any hurt of them, and you ſhall come ſo by little and little before St *Ellens* Church. When the Church cometh two Ships lengths within the red Point, then you ſhall not come too near the Riff at the Point. Or elſe if you cannot ſee the *Lime-kiln*, then keep the Caſtle to the Weſtwards of the *Culver-Cliffe*, until

until that St. *Ellens* Church cometh a Ships length without the Point of the Iſland; go then boldly Northweſt in, and you ſhall not come too near the Riff; and then bring the ſquare Tower betwixt the Eaſt end of *Portſmouth*, and the Caſtle: when the Caſtle to the Weſtwards of *Portſmouth* cometh to the Eaſt ſide of the wood, then you ſhall not (as here before is ſaid) neither come too near either the Plate or the Sand, to take any hurt of them.

When the Eaſtermoſt white ſpot ſtandeth a Ships length to the Weſtwards of the Caſtle, then you are to the Eaſtwards of the Riff, and when the Culver-cliff is covered or hidden behind the Northeaſt Point of the Iſland, then are you alſo within the Riff. The Marks of the little Plate are theſe; there ſtandeth a ſquare Tower within the Land, and a Caſtle on the water ſide to the Eaſtwards of *Portſmouth*; thwart from it lyeth the foreſaid Lime-kiln; when that cometh to the Eaſtwards of the foreſaid Caſtle, ſo that you may even ſee through betwixt them both, then are you upon the little Plate, which at low water is not deeper than 10 Foot; then ſtandeth the Caſtle to the Weſtwards of *Portſmouth* at the weſt ſide of the Wood. But when the foreſaid ſquare Tower cometh to the weſt ſide of the foot of the Caſtle, and the Caſtle by weſt *Portſmouth* to the weſt ſide of the Wood; there it is deep at low water upon the little Plat 12 Foot.

Marks of the Plate.

When the ſquare Tower ſtandeth betwixt the Eaſt end of *Portſmouth*, and the Caſtle even betwixt the Lime-pit and the Tower, and the Caſtle by weſt *Portſmouth* in the weſt ſide of the Wood; there it is at high water 10 Fathom deep.

When St. *Ellens* Church lyeth Southweſt and by weſt from you, then lyeth the Southeaſt end of the Plate Northeaſt and by North from you, and the weſt end North and by Eaſt.

From the Point of the Road *Newport* Eaſtwards lyeth a broad Sand along the Shoald, called *No mans Land*, which falleth almoſt dry at low water; it is ſo ſteep, that half a Cables length off from it, it is 12 Fathom deep: upon the high Land of *Wight* thereabouts ſtand 2 or 3 Mills. If you come near the Shore, that the foreſaid Mills be hidden behind the foreſaid high

No mans Land.

high Land, you ſhall not miſs to come aground againſt that foreſaid Sand; but ſo long as you can ſee theſe Mills, you ſhall go clear of it.

The Road of the *Cows* is the beſt Road in *Wight*. Over againſt, betwixt that and *Calſhot* Caſtle, lyeth a hard Sand neareſt the North Shore, lying from thence to the weſtwards along the fair way, almoſt ſo far as thwart of *Newton* called the *Brambles*; at low water and Spring-tides it falleth almoſt dry, and then the Sea breaketh much upon it: to the Northwards of it goeth alſo a Channel through, but it is not to be uſed, but with ſmall Ships. *The Brambles.*

For to Sail in at the weſt end of *Wight*, you muſt run right in with the *Needles*; (they are high ſharp Rocks as Maſts lying at the weſt end of *Wight*,) bring then the innermoſt Point of *Wight*, or the Caſtle that ſtandeth upon the Chindle over againſt that Point, called *Hus* Caſtle a little without, or to the Northwards of the *Needles*, Sail in there upon, until you come to the *Needles*; leave them then on the Starboard ſide of you, and run in within a Cables length along by them for to avoid the Banks which lie off from the Chindle to the Northwards of the *Needles*, of the weſt end of *Wight* almoſt to the *Needles*. Betwixt the Banks called the *Swingels* and the *Needles* it is not very broad, and at low water 5 Fathom deep. When you Sail in here, you muſt caſt your Tides well. The Fore-flood falleth ſtrong upon the Banks; when you are then come within the *Needles*, then edge a little more off from the Shore unto *Hus* Caſtle that ſtandeth upon the Chindle, for to avoid ſome Rocks which lie along by the Iſland under water. Being come within the Caſtle or Chindle, there it is wide and broad, leave two third parts of the Channel on the Larboard ſide; and one third part on the Starboard ſide; Sail ſo in until you come before the Village of *Newton*, and Ankor there in 9 or 10 Fathom, or elſe Sail forth (if you will) about the Point of the *Cowes*, and Ankor there before the Haven of *Newport* in 10 or 12 Fathom, there is the beſt Road, and beſt lying of all the Roads in *Wight*. The Haven or Road before *Newport* lyeth from the foreſaid *Hus* Caſtle upon the Chindle N. eaſt and by Eaſt, and Eaſt N. eaſt about 2 Leagues aſunder. *For to Sail in at the Needles.*

From

Peverel-point. From the *Needles* of *Wight* Weſt and by South about 3 Leagues, lyeth the Point of St. *Albans* Land, called *Peverel* Point; from it lie off ſome little Rocks to the Eaſtwards. A little to the Northwards of that Point is a Bay, called the Bay of *Sandwich*; there is a good Road for them that are bound to the Weſtwards; If you will go to ride there coming from the Weſtwards, you may take the ſounding of S. *Albans* Land, and run aboard the Point in 4 or 5 Fathom at a half Flood, and you ſhall take no hurt of thoſe little Rocks. Being gotten about the Point, edge by it up to the Weſtwards towards *Sandwich*. A little to the Northwards of *Sandwich* in the Bay, lyeth a round *Hommock*, and thwart of it ſomewhat within the Land ſtandeth a Mill; bring that Mill to the South ſide of the round *Hommock*, and Sail ſo in until you come in 4 or 3 Fathom, and Ankor there ſo deep or ſhoaldy as you will; there it is good lying for Southweſt winds.

Sandwich Bay.

A little League North and by Eaſt from the foreſaid Point, right Weſt from the *Needles* of *Wight*, lyeth another Point, called *Handfaſt point*; to the Northwards of it lyeth a little Town called *Studland*, before it is alſo a good Road. Upon the outermoſt part of that Point, is a hole through the Land, where Men may ſee through, and a little without the Point ſtandeth a high ſteep Rock like a Maſt, almoſt like the *Needle* at the Weſt end of *Wight*. For to come to ride before *Studland*; you muſt ſail about the ſecond Point, with the hole or the ſteep Rock, in 4 or 5 Fathom, and go in Weſt Northweſt towards *Studland*: a little to the Southwards of it lyeth a little Valley, bring that Weſt Southweſt from you, and go towards the ſhore, in 4 or 3 Fathom and a half there is the beſt Road; and lying there, you may ſee the foreſaid hole in the Point.

Handfaſt-point.

Studland.

A League to the Northwards of that foreſaid Point with the hole, lyeth the Haven of *Pool*; for to Sail in there, coming about the foreſaid ſecond Point with the ſteep Rock, you muſt go on Northweſt, or ſomewhat more Northerly, and then you ſhall ſee right a Head of you a high flat Hill, which ſtandeth higher than any other Land thereabouts, keep that betwixt the two ſhores, and run in ſo right with it. If you muſt turn to

Pool.

and

and again, then ſpare not to uſe your Lead, and run not further over to the Weſtwards, than that the flat Hill come to the weſt Land, ſo ſoon as it beginneth (as it were) to touch it, you muſt caſt about, or elſe you ſhould be faſt aground; and after you have caſt about, run not further over to the Eaſtwards, than that the foreſaid high flat Hill cometh even to the Eaſt Sand-hill, which is a high, gray, ſharp ſandy Hill, lying at the Eaſt ſide. If you keep theſe foreſaid Marks in this manner, you ſhall have there going in at half Flood water enough; there remaineth upon the ſhoaldieſt at low water 10 and 11 Foot, but it floweth there no more than 5 Foot up and down. It floweth there twice in a Tide. A Southeaſt and Northweſt Moon maketh there full Sea: alſo, a South and by Eaſt, and North and by Weſt Moon once more; that cometh to paſs by reaſon of the fore-ebb that cometh out of *Wight*. When you come within the entry, go then N. Northeaſt on, and keep the Beacons that ſtand on the Eaſt Land on the Star-board from you, and run indifferent cloſe along by them. The Shores are on both ſides ſteep, and the Channel is not wide; without the Channel it is ſhoald or flat. This is Pilots water.

From the Weſt end of *Wight* to the Point of *Portland*, the Courſe is Weſt Southweſt 11 Leagues: but from *Dunnoſe*, the Southweſt Point of *Wight*, Weſt and by South thirteen Leagues. *Portland.*

If you will go to Ankor under *Portland*, (coming from the Weſt,) then come within 2 Cables length, or a ſhot of a caſt Piece about the Point of *Portland*, and being come about the ſecond Point, edge up to the Weſtwards until you come before the Caſtle, and Ankor there in 7, 8, 9, 10, or 11 Fathom, ſo that the Point of *Portland* do lie South and by Eaſt, and South Southeaſt from you, there you ſhall lie Land-lockt for a South, and South and by Eaſt wind. With a Southweſt, and South Southweſt wind, Men muſt be very mindful of terrible rippling of the Race of *Portland*, which beginneth a little to the Weſtwards of *Portland*, and endeth a little to the Weſtwards of St. *Albans*. The Ground in that Race is very uneven, and ſhoaly, ſometimes 7, otherwhiles 10, and alſo 15 Fathom deep. *Road under* Portland.

Waymouth About a League to the Northwards of the Road of *Port-land* lyeth a little Town called *Waymouth*, with a Tide-haven; before it Men may Ankor in 4 or 5 Fathom.

Of the Tides and Courses of the Streams.

AT *Beachy* by the shore before the 7 *Cleeves*, the Flood falleth East and by South, and the Ebb W. and by North.

From *Wight* to *Beachy* East and by North, and West and by South thwart of *Wight*, before *Dunnose*, a South and by East Moon makes full Sea.

At St. *Ellens*, and the *Comes* a South Southeast Moon.

At *Hampton* at the *Kay* a South and North Moon.

Within the *Needles* of *Wight* a Southeast and by South Moon.

Before the Haven of *Pool*, a Southeast and Northwest Moon maketh high water: also a South and by East, and by West.

Thwart of *Portland* in the Channel, a South Southeast, and North Northwest Moon.

From *Portland* to *Wight*, the Flood falleth East and by North, and the Ebb West and by South.

Of the Depths.

WIthout *Beachy* thwart of the *Seven Cleves*, it is deep 28 and 30 Fathom.

In the *Offing* thwart of *Wight*, it is deep 38 Fathom; in such depth Men may see the Land.

In the Channel betwixt *Portland* and the *Caskets* it is 40 Fathom deep; when it is clear weather, Men may see the Land on both sides: the nearer *England* the shoaldier, towards the *Caskets* it is deepest.

For

For to know the Courses and Distances from place to place. *See the* Pilots Sea-Mirrour, *in* pag. 32, 33.

Of the Latitudes.

Dunnose the Southermost Point of *Wight* lyeth in 50 *degr.* 36 *min.*
Portland lyeth in 50 *degr.* 26 *min.*

How these Lands do shew themselves at Sea

Thus sheweth Beachy *with the* Seven Cleeves, *when you come from the West, and Sail along by it.*

Thus sheweth the Island Wight, *when you Sail along by it, being* 3 *or* 4 *Leagues a Sea-board the Land.*

Thus sheweth Portland *when you come from the Westwards.*

Thus sheweth Portland *when it is North and by West from you 6 Leagues off.*

Thus sheweth Portland, *when you come from the Eastwards.*

Portland.

Thus sheweth S. Albans Land, *with* Portland, *to the Westwards of it, when you Sail along by it, being to the Eastwards of* Portland.

VIII Demonstration,

Wherein

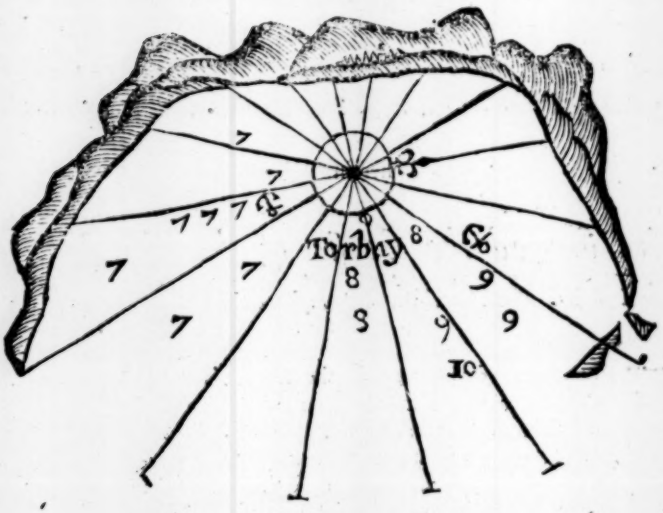
Are ſhewed the Coaſts of England, *From* Portland *to the* Lizard.

FRom *Portland* to *Exmouth*, the Courſe is Weſt North-weſt 13 Leagues; betwixt them both lyeth a little Iſland cloſe by the Land, called *Cob*. Before *Exmouth* Men may ride (at the South end of the Chindle, which lyeth before the Haven) in 7 or 8 Fathom, ſo that the Rocks of *Tomanſtones* do come to lie South, and South and by Eaſt from you, there it is good Ground, and Land-lockt for a South wind. 1. Cob.

Five Leagues South, and S. and by W. from *Exmouth* lyeth *Torbay*, and lyeth from *Portland* Weſt, and W. and by South, diſtant 13 Leagues. TORBAY.

TORBAY.

TORBAY.



For to go into the Road of *Torbay*, you must bring the West Point South and by East, and South Southeast from you, and Ankor there in 7 or 8 Fathom, you shall lie Land-lockt for South and Southwest winds. At the Northeast side of the Bay is also a Tide-haven before it; it is good Ankor Ground in 4 or 5 Fathom, according as you will lie near or far from the shore.

Dart-mouth. Three or four Leagues Southwards, or to the Westwards of *Torbay*, lyeth the Haven of *Dartmouth*, which hath a narrow entry, lying in betwixt 2 high Lands; upon each side of the Haven standeth a little Castle, in time of Wars they were wont to shut it over with a Chain; on the West side standeth a little Church on the high Land. For to Sail in there coming from

from the *Steart* or from the Weſtwards, you muſt run in along by the Weſter-land, ſo far to the Eaſtwards, until you bring the *Kay* of the Village (that lyeth on the Eaſt ſide of the Haven) in the midſt of the entry of the Haven, and Sail ſo in, keeping the midſt of the Haven betwixt the two Lands; and you muſt be very ready with the Boat (if there ſhould come any ſore ſlangs from the high Land) for to row in. Being come in, edge over to the Weſt ſide, before the Brew-houſe, and Ankor there in 10 or 12 Fathom, or before the Village on the Eaſt ſide where you pleaſe.

At the Eaſt ſide of the Range lyeth a ſunken Rock; the Marks to avoid it are theſe. To the Eaſtwards of *Dartmouth* is a red Point, which below by the water is black, and in the red lyeth a white Stone; when the white Stone cometh over the black Point, then are you thwart of the ſunken Rock; but if you ſee the *Kay* of the Village, and do as before is ſaid, then you ſhall not come too near that ſunken Rock to take any hurt of it.

Betwixt *Dartmouth* and the *Steart*, neareſt to *Dartmouth*, ſtandeth a Spire Steeple indifferently high and white, called *Tackman*; that is a very good mark to know the Haven of *Dartmouth* by.

The *Steart* lyeth from *Dartmouth* Southweſt, diſtant three Leagues. Under the Point of the *Steart*, at the Eaſt ſide is a good Road for Weſterly winds: betwixt the little Church that ſtandeth upon the high Land, and the Point of the *Steart* in 10 or 11 Fathom, ſo that the Point lyeth Southweſt from you. *Steart.*

A little to the Eaſtwards of the Weſtermoſt Point of the *Steart* lyeth a Haven, called *Salkom*, when you come from the Weſt, it ſheweth it ſelf open; the Weſt ſide of it is ragged, and the Eaſt ſide of it goeth ſloping down; cloſe to the Weſt Point lyeth a Rock, or a ran of Rocks, therefore you muſt give it a good birth, and leave the Rocks on the Larboard-ſide: Further, you may ſee all breaks that can do you hurt. Being come within the Point, you can take no hurt of either of both Shores. Upon the Bar or Shoalds of the entry, remaineth at low-water with a Spring-Tide, not leſs than 11 Foot water, and again within, it is at leaſt 3 Fathom deep. *Salkom.* *Plimouth.* *Mewſtone.*

Seven

Seven Leagues to the Westwards of the *Steart* lyeth the Sound of *Plimouth*, at the outermost East Point of the Sound
Mewstone. lyeth a high round Rock called *Mewstone*; the West Point is called *Ramhead*, betwixt them both goeth in the Sound of *Plimouth* North Northeast in, it is broad and deep. A little to the Northwards of *Ramhead* is a fair Sand-Bay, where Men may Ankor close under the Land in 9 and 10 Fathom. Two Leagues South a little Easterly from *Ramhead*, lyeth a Rock
Eddistone, above water called *Eddistone*. The Point of *Plimouth* lyeth from the *Eddistone* North and by East, and North Northeast, distant about 4 Leagues. In the Sound, by the Land of *Plimouth*, lyeth a little Island, which is fast to the West side with a Riff or Ran of Rocks under water, so that Men may Sail along
Catwater. to the Eastwards of it, whether they be bound to *Catwater*, or into *Hamoase* the West Harbour. If you will go into *Catwater*, then run in betwixt the Island and the Point on the East side, in with the Land of *Plimouth*, until you see *Catwater* open on the Starboard-side of you; go then into the Eastwards betwixt the Point of *Plimouth*, and the foresaid East Point on the Star-board side of you, leaving the most part of the Channel on the Starboard side of you, until you come within the Point, and Ankor there right against that high steep Norther-land; there is at low water with an ordinary Tide 4 and 5 Fathom deep.

When you Sail into *Catwater*, you must take heed, and give a good birth to the Southern Point of the entry of *Catwater*; for there lie off to the foresaid Point, a ledge of Rocks under water, near about 2 Cables length from the Land, and upon the Point of the ledge or shoald lyeth a Buoy, where is at half Flood about 12 Foot water, which Buoy you must leave on your Starboard side in going into *Catwater*; and when you have *Catwater* altogether open, you may run into the Eastwards, leaving (in the entry of the Harbour) two third parts of the Channel on the Starboard side, as before is said, because the South shore is somewhat off, there lying a flat sandy Bank, which reacheth to the second Point of the South shore of *Catwater*.

A little to the Eastwards of that foresaid little Island, lyeth a Rock under water, upon which is at low water not deeper than

two

two Fathom. For to Sail within the Iſland, you may go in to the Eaſtwards, or to the Weſtwards of the Rock according as occaſion ſhall ſerve. If you will Sail into *Hamoaſe*, to the Weſtwards of the Rock, then take the Sounding of the Iſland in 4 or 5 Fathom at low water, and run in ſo by it, until that the Fiſher Village (lying to the Northwards a little within the Land) come in the Weſt ſide of the Valley on the North ſhore, then are you to run through between the Iſland and the Rock, and to the Weſtwards of the Rock. Within the Iſland upon the Land of *Plimouth*, ſtandeth a Wall or Hedge, when as you ſee that an endling, and the Chappel of the foreſaid Fiſher Village cometh to the North ſide of the Valley, and *Catwater* cometh open, then do you run over the Rock. Between the Iſland and the Main, Men may Ankor in 12 or 13 Fathom.

If you be bound into *Hamoaſe*, you muſt run in between the Iſland and the Land of *Plimouth*, and then in the midſt of the Channel between the two Lands, until that the entry of *Hamoaſe* be open; run then into the Northwards, as the Channel leadeth, until you come in about the Weſt Point, and Ankor there in 16, 15 and 12, or 10 Fathom. In the narrow, it is 15, 16, 17, and alſo 20 Fathom deep; and between the Iſland and the Main, 8, 9, 10, and 12 Fathom. *Hamoaſe.*

About half a Cables length to the Eaſtwards of the paſſage way going into *Hamoaſe*, lyeth a ſunken Rock under water, called the *German*, about two great Ships length from the ſhore, and at low water hath not above 4 Foot water upon it. And when Men do come any thing near this foreſaid ſunken Rock going into *Hamoaſe*, either with the Flood or the Ebb, the Tide will ſet them right upon it, if it be calm. Therefore to avoid it, Men muſt (with calm weather) give this foreſaid ſunken Rock a good birth, until they bring the Houſes of the Fiſher-Village, (called the *Stone-houſe*) open of the Eaſter Point of the Paſſage way, and then run over towards the North ſhore, until they have hidden the Iſland in the foreſaid Eaſtern Point of the Paſſage way, for to avoid a ſunken Rock that lyeth off to the Eaſtwards from the North Point of the *Beach* on the Weſt ſide of the Paſſage way, a half Cables length off, then run amidſt *The German a ſunken Rock.* *Sunken Rocks.*

the Channel into *Hamoaſe*. Upon this foreſaid ſunken Rock at low water, is not above 3 or 4 Foot water.

Sunken Rocks. In the Sound of *Plimouth*, not far to the Northwards of the *Mewſtone*, lie 2 or 3 ſunken Rocks, upon which remaineth at low water, not more than 3 or 4 Fathom water, the Marks of them are theſe; to the Eaſtwards of *Plimouth* ſtandeth a Tower with a Mill, and to the W.wards of the foreſaid little Iſland ſtandeth a Gentlemans Houſe; when the little Tower or Turret of that Houſe cometh over the Point on the W.ſide of the Iſland, and the foreſaid Tower and Mill to the Eaſtwards of *Plimouth* come one over the other, then are you upon the innermoſt ſunken Rock or Shoald, which is at low water 4 Fathom deep. But when the Point of *Hamoaſe* cometh even without the Point to the Weſtwards of the Iſland, and the foreſaid Tower and Mill alſo one in the other, then are you upon the outermoſt Rock, where it is at low water and Spring-tide 3 Fathom and a half deep.

Louw-Iſland. From *Ramhead* Weſt and by South 5 Leagues, lyeth *Foy*, and betwixt them on the Coaſt lyeth a little Iſland, a little to the Eaſtwards of a Point, called *Talland-point*, thwart of *Weſt-Louw* called *Louw-Iſland*; you may Ankor there to the Eaſtwards of the Iſland in 5 or 6 Fathom.

Foy. *Foy* is a broad Haven, where a Ship may go in at a half Flood; at the Eaſt ſide of the Haven ſtandeth a little Church, with a little Steeple, and on the Weſt ſide a white Church, ſomewhat greater than that upon the Eaſt land, with a ſquare Steeple at the Weſt end of it.

For to Sail into *Foy*, you muſt have at leaſt a half Flood, and run in amidſt the Channel betwixt the two Points; and being come within, then chooſe which ſide you will, but the moſt water is by the Weſt Land, between the Stakes and the Tower that ſtandeth upon the Weſt Land. Being come within the Stakes (as you come in by the Weſt Land) then bear ſomewhat off preſently from the Weſt ſhore, almoſt into the middle of the Channel, neareſt to the Weſt Shore, until you come before the Village that lyeth on the Weſt ſide, there is a deep Dock, where a Ship that draweth 16 Foot water may lie afloat at low water. In the ſaid Dock may 20 Sayls lie. If

If (when you come in by the Eaſt Land) you deſire to be in the foreſaid Dock or Pool; then Sail in until you come within the Stakes, and then edge over off from the Eaſt Land, until you come neareſt the Weſt Land, for to avoid a Flat, which lyeth by the Eaſt ſhore along the Haven, and beginneth againſt the firſt Houſe of the Weſt-Village. If it ſhould happen, that you could not lead it in with a Sail, then let your Ankor fall without the Stakes, and warp in with Hawſers, until you come into the foreſaid Pool.

You may alſo Sail ſo far in, that you may ſee a wall on the Weſt ſide of the Haven, where lyeth a Village behind it. A Ships length to the Southwards of that wall, it is good lying by the Eaſt Land, being moored by 4 Cables; there may alſo a Ship ride afloat that draweth 16 Foot water. You may alſo Sail further in along by that *Swach* that lyeth on the Weſt ſide, wherein the Mill ſtandeth; but come not too near the North Point of the *Swach*, for there by it lyeth a Rock under water; being paſt that, you may Moor your Ship in the midſt of the Channel, there is beſt lying for Ships that draw much water.

Four Leagues Southweſt and by Weſt from *Foy*, lyeth the Point of *Dodman*; and two Leagues to the Weſtwards of it lyeth the Haven of *Falmouth*. The Point of *Dodman* is double Land with a round Hill, which to the Weſtwards goeth ſloaping down; ſomewhat towards the Weſt end ſtandeth a Mill with a ſharp Tower, and ſome little Houſes upon the Land, ſomewhat to the Weſtwards, Men may ſee the Caſtle of *Falmouth* upon a round Hommock againſt the high Land. This Land is very eaſie to be known when you come from the Weſt, or from the *Lizard*. *Dodman.*

Upon the Weſt Point of the Haven of *Falmouth* ſtandeth a Caſtle upon the high Land; and in the entry neareſt the Weſt ſide, lyeth a great Rock above water, you may Sail about it on both ſides; at the inner ſide of the Eaſt Point lie alſo ſome Rocks off from the Shore. For to Sail in there to the Eaſtwards along by the foreſaid Rock, you muſt run in within two Cables lengths along by the Eaſt Land leaving the foreſaid Rocks on *Falmouth.*

the Starboard ſide, and the great Rock on the Larboard ſide, and ſo Sail right in with the high Land that lyeth on the Weſt ſide within the Haven. Within in the Haven ſtandeth on the Land a white Chalky ſpot, alſo a little Wood of Trees; keep them over the North Point of the foreſaid high Weſt Land, and Sail ſo right in with them, keeping them ſo until you come near them, you ſhall find ſo at half Flood upon the Shoaldieſt, not leſs water than 5 Fathom, and that betwixt the foreſaid Caſtle upon the Weſt Point, and the Eaſter Caſtle that ſtandeth on the Eaſt ſide within the Haven, over againſt it or a little within the Caſtles. When you ſhall then come by that foreſaid high W. Land, run along by it, unto the North end of the ſame, and Ankor there in 12, 13, or 14 Fathom. You may alſo from thence edge over towards the Eaſt Land, and Ankor there under or behind the Bank that lyeth off from the Eaſtern Caſtle along the middle of the Haven, in 6, 7, or 8 Fathom: the Bank falleth almoſt dry at low water, and is ſoft Ground, ſo that the Ships ſit in the Oaſe, when they come there aground.

For to Sail into the Weſtwards of the foreſaid great Rock, you muſt take the Sounding of the Weſt Land, where the Caſtle ſtandeth upon, in 5 or 6 Fathom; being ſomewhat within the Rock, run (as before is ſaid) towards the Weſt Land. To the Weſtwards of the Rock, it is in that Channel 6 and 7 Fathom deep at half Flood; but in the Channel to the Eaſtwards of the Rock, 7 and 8 Fathom.

Four Leagues South and by Weſt from *Falmouth*, lyeth the Eaſt Point of the *Lizard*: betwixt them both lyeth a Haven called *Helford*, which is little uſed for Ships.

Helford.

At the South ſide of the Haven lyeth a ſteep Point, and on the North ſide a low ſharp Point. Within the Haven on the South ſide, ſtandeth a Gentlemans Houſe beneath at the Strand, and upon the Hill ſtandeth a tuſs of Trees, you muſt keep theſe one in the other, and run ſo amidſt the Channel into the entry of the Haven. On the North ſide ſtand 2 or 3 Trees, theſe come a Maſts length to the Weſtwards of a little Houſe that ſtandeth in a white Sandy Bay, thereupon you may Sail in alſo amidſt the Channel; it is a ſhort In-let, being come within,

you

you may Ankor in 6 or 7 Fathom. Upon the South ſide ſtandeth alſo a ſharp Tower, and upon the North ſide a little Caſtle upon the ſteep Land.

The *Lizard* hath 3 Points; the Northermoſt is called *Black-head*, from that, to the ſecond, the Coaſt lyeth Southweſt and by Weſt, and along to the third about W. Southweſt, or W. and by South: from the ſecond or middlemoſt Point, lie to the Seawards ſome Rocks a Cables length, or a Cables length and a half off, called the *Stags*.

To the Northwards of the Northermoſt, or Eaſtermoſt Point of the *Lizard*, betwixt *Helford* and the foreſaid Point, lie ſome Rocks a great League off from the Land, called the *Manacles*, South and by Eaſt from the Harbour of *Falmouth*, and Eaſt Northeaſt from the foreſaid *Black-head*, whereof many of them are above water at low water, and ſome of them at high water remain uncovered. Betwixt them and the Shore it is very fowl and Rocky, ſo that Men cannot run through betwixt them, without great danger. *Manacles.*

He that cometh out of *Falmouth*, and is bound to the Weſtwards, muſt not go more Southerly with an Ebb, than South Southeaſt, or Southeaſt and by South according as the Wind ſhall be, for to run clear of theſe aforeſaid.

Of the Tides and Courſes of the Streams.

IN *Dartmouth* and *Torbay*, a Weſt and by South Moon maketh full Sea.

Thwart of the *Steart* in the Channel, a Weſt Northweſt, and Eaſt Southeaſt Moon.

From the *Steart* to *Portland*, in the midſt of the Channel, the Flood falleth Eaſt Northeaſt, and the Ebb Weſt Southweſt.

Thwart of *Dartmouth* by the Land, the Flood falleth Northeaſt and by North, and the Ebb Southweſt and by South.

Thwart

Thwart of *Torbay* towards *Exmouth* in the Bay, the Flood falleth North Northeaſt, and the Ebb South Southweſt.

In *Plimouth* and *Foy*, a Weſt and by South, and Eaſt and by North Moon maketh the higheſt water.

Thwart of *Foy* in the Channel an Eaſt Southeaſt Moon.

A Sea-board off *Falmouth* an Eaſt and by South; but in the Haven of *Falmouth* an Eaſt and by North Moon.

At *Helford*, and at the *Lizard*, by the Land, an Eaſt Southeaſt, and Weſt Northweſt Moon maketh the higheſt water.

From *Ramhead* to the *Steart* by the Land, within the *Eddiſtone*, the Flood falleth Eaſt Southeaſt, and the Ebb Weſt Northweſt.

From *Dodman* to *Ramhead*, the Flood falleth Eaſt Northeaſt, and the Ebb Weſt Southweſt,

From the *Lizard* to *Dodman*, Northeaſt and Southweſt.

In the Channel betwixt the *Lizard* and the *Steart*, thwart of *Foy*, the Flood falleth Eaſt and by North, and the Ebb Weſt and by South

Of the Depths.

THe *Steart*, and the Land of *Dartmouth* Men may ſee them both in 45 Fathom.

When you have the high Land of *Plimouth* North from you, you may ſee it in 50 Fathom; it is high double Land, and ſheweth it ſelf firſt in two Hills. That ſame high double Land within the Land, you may ſee it from thwart of *Foy*, until you come thwart of *Dartmouth*.

The *Dodman* you may ſee in 42 Fathom off from the *Lizard*, to the *Steart*.

The *Lizard* you may ſee in 53 Fathom; there the Ground is white and red ſhelly Sand.

Of the Latitudes.

The *Steart* lyeth in	50 *degr.* 12 *min.*
Or as ſome will hold, more Northerly.	
Torbay lyeth in	50 *degr.* 28 *min.*
The *Lizard* lyeth in	50 *degr.*

For to know the Courſes and Diſtances from place to place. See the Pilots Sea-Mirrour, *in* pag. 32, 33.

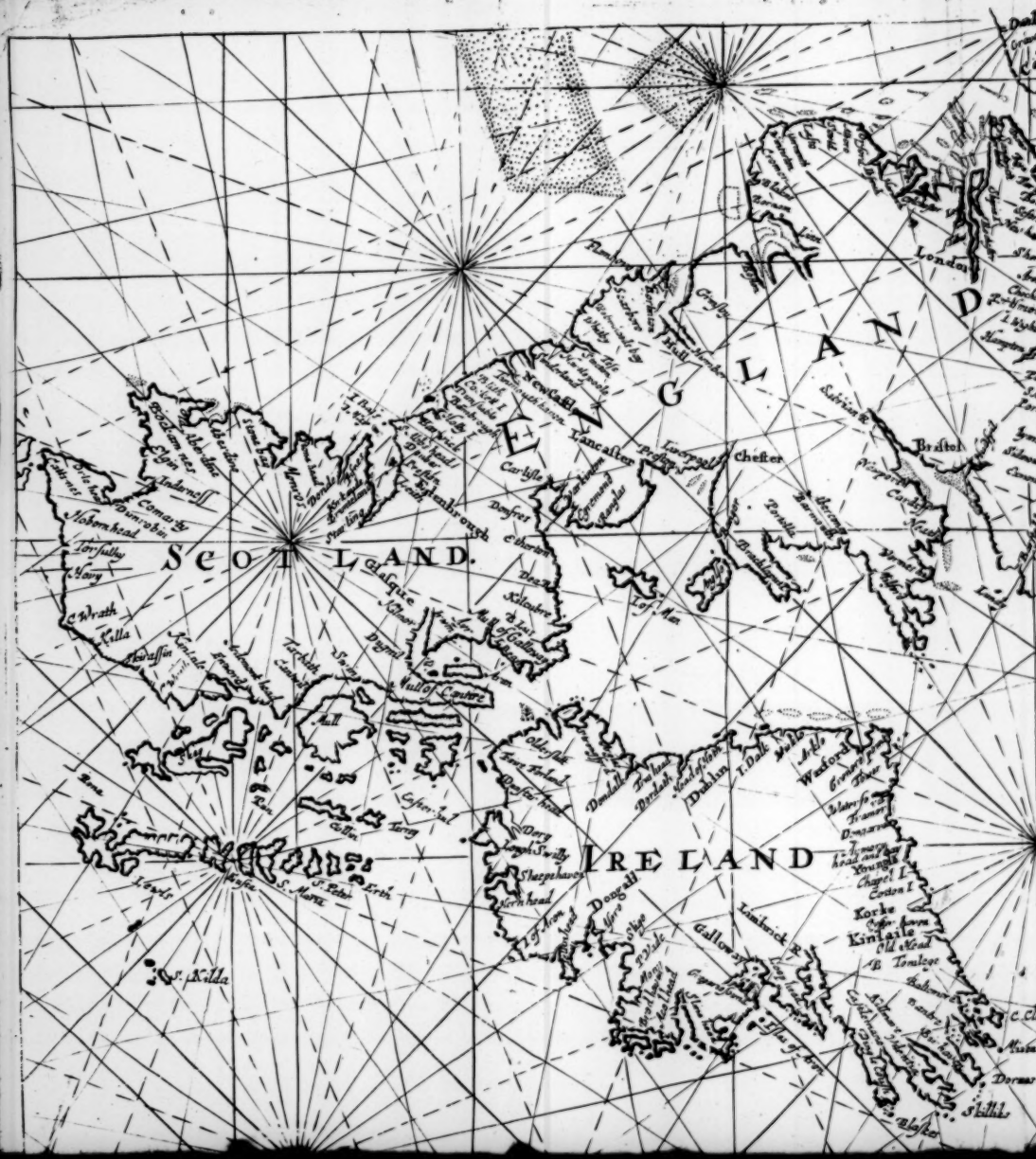
How theſe Lands do ſhew themſelves at Sea.

The Land betwixt Torbay *and the* Steart *ſheweth thus.*

Thus ſheweth the high Land to the Eaſtwards of Plimouth.

Thus sheweth the Land between the Dodman *and the* Lizard.

Thus sheweth the Lizard, *when you Sail along by it.*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IRELAND
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Waterford
Galloway
Dogall
Kintaile
Lough Swilly
Sligo
Galway
Connaught
Munster
Ulster
Leinster
Hebrides
Orkney Isles
Shetland Isles
Lewis
Skye
Mull
Jura
Islay
Arran
Ila
Rathlin
Isle of Man
Anglesey
Holyhead
Milford
Bristol Channel
Irish Sea
St. Kilda
C. Wrath
Cape Clear
Dunnet Head
Buchan Ness
Aberdeen
Edinburgh
Glasgow
Stirling
Perth
Dundee
Montrose
Berwick
Tweed
Solway Firth
Forth
Clyde
Tay
Spey
Dee
Mersey
Humber
Severn
Thames
Wash
Yarmouth
Harwich
Portsmouth
Plymouth
Falmouth
Scilly
Land's End
Lizard
Start Point
Beachy Head
Dover
Calais
Boulogne
Flamborough Head
Scarborough
Whitby
Hartlepool
Sunderland
Tynemouth
Farne Islands
Holy Island
Lindisfarne
Isle of Wight
Portland
Weymouth
Exeter
Torbay
Bideford
Barnstaple
Minehead
Bridgewater
Cardiff
Milford Haven
Pembroke
Caernarvon
Conway
Liverpool
Preston
Manchester
Derby
Nottingham
Lincoln
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Colchester
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Rochester
Gravesend
Deptford
Greenwich
Lambeth
Westminster
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Grantham
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York
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Richmond
Appleby
Carlisle
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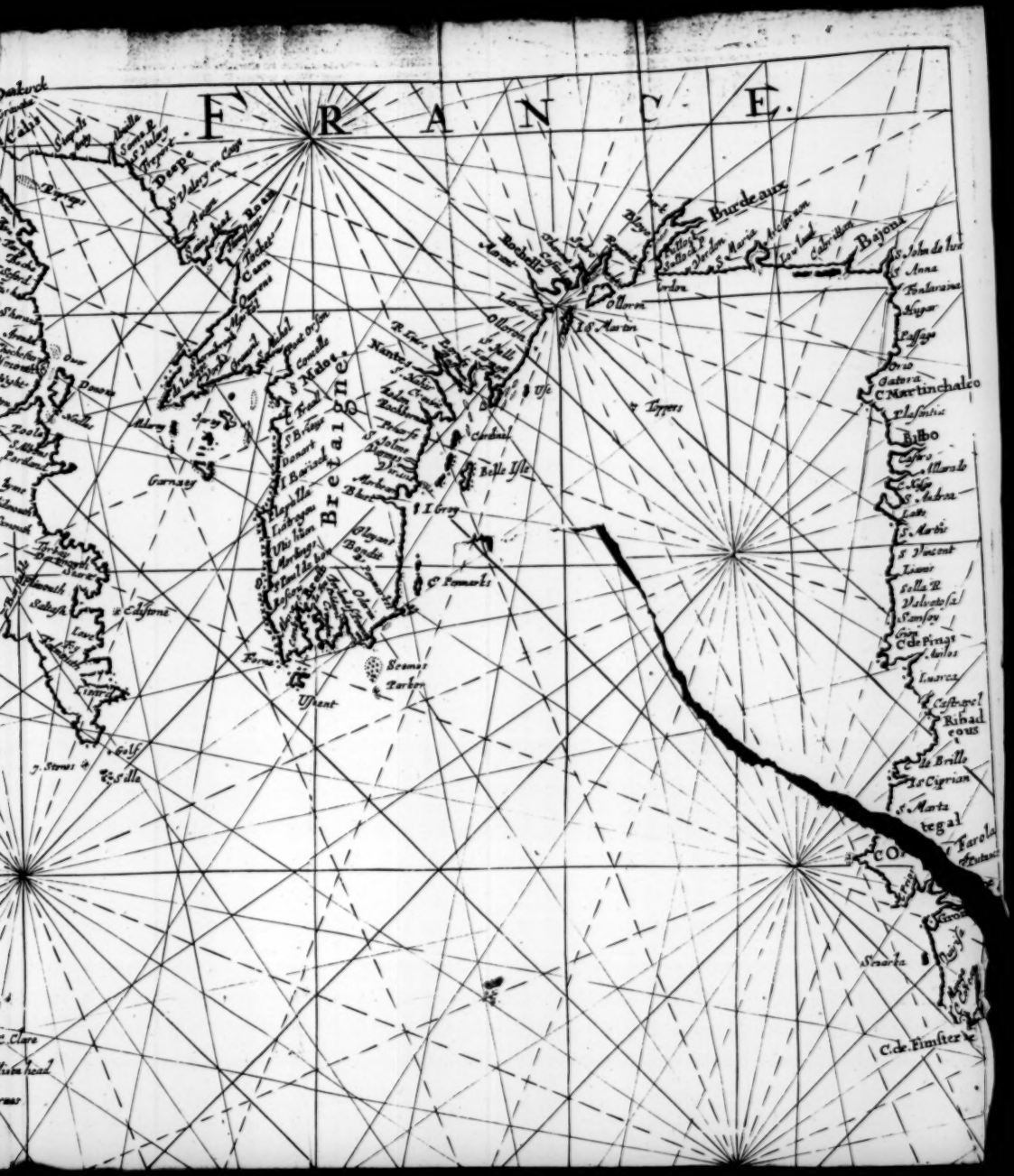
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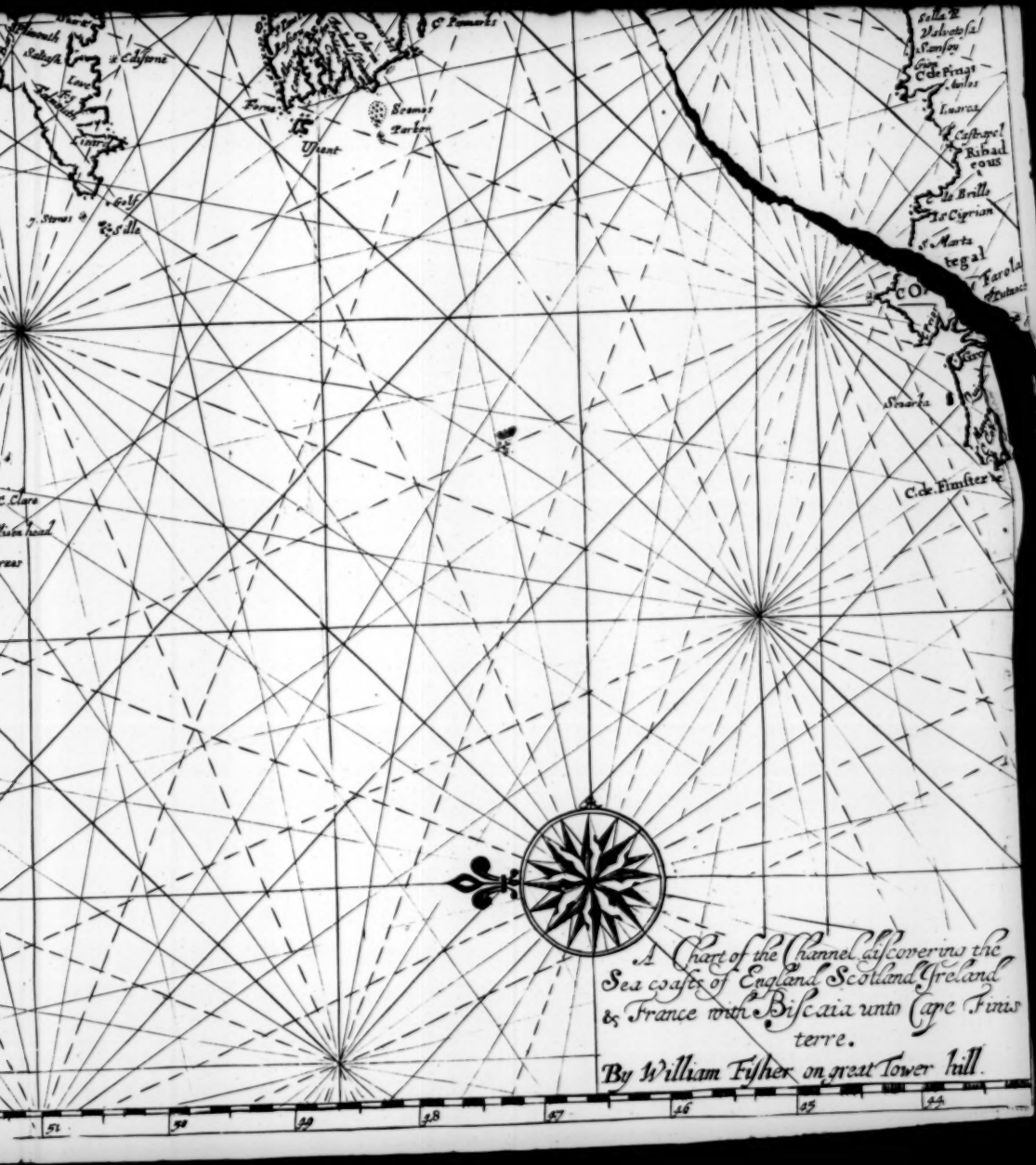
Toppers
Garnsey
Edistone
Ushant
Scomes
Parker
Golf
Sille
C. Martinchalco
Bilbo
Rihadeous
C. de Finistere
Scarba

SCOTLAND.
IRELAND
St. Kilda
Rockal
10 20 30 40 50 60
A Scale of English Leagues
58 57 56 55 54 53 52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Land's End
Cape Clare
Usshead
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Ushant
Golf
Scilly
Sorlingues
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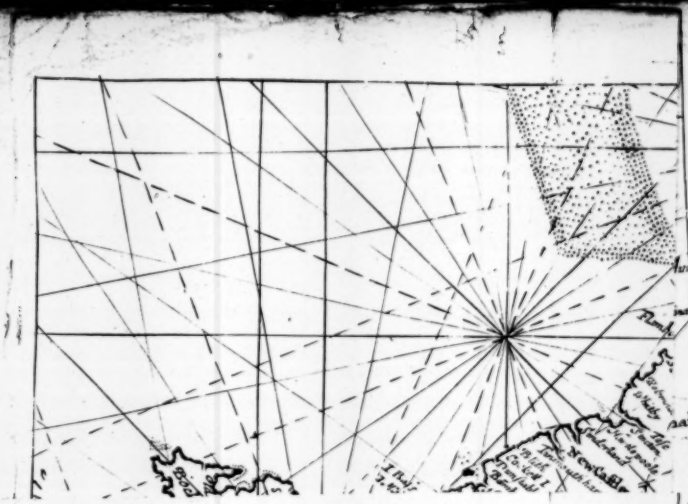


IX Demonstration,

Wherein

Are delineated the Coaſts of *England*, from the *Lizard*, and the *Lands-end*, to the Cape of *Cornwal*, the *Sorlings*, and the Channel of *Briſtow*.

THe *Lizard* is a low Point, where ſome Rocks lie off from it; upon the South end of it ſtandeth a Tower, and upon the high Land towards the North end ſtandeth another Tower, which is ſharp. *The* Lizard

About 5 Leagues Northweſt from the *Lizard*, lyeth a great Bay, called *Mounts-Bay*: at the Weſt Point of that Bay lyeth a little Iſland, whereupon ſtand 2 little ſhort Towers like Beacons; on the Eaſt ſide in the Bay lyeth another high little Iſland, whereupon ſtandeth a Caſtle, called St. *Michael's Mount*; on the Eaſt ſide of this Bay lyeth a great ran of Rocks, which lie off into the Sea a League from the Land, whereof Men muſt take good heed in dark weather, from thence to the Southward towards the *Lizard*, the Coaſt is all along full of Rocks, but theſe lie not ſo far off from the Shore. *Mounts-Bay.* *S. Michaels Mount.*

For to Sail into *Mounts-Bay*, coming from the *Lands-end*, or from the *Lizard*, and being to the Weſtwards of the foreſaid ran of Rocks, you muſt run in right with the little Iſland called St. *Michael's Mount*, ſo long, until you come within half a League of it, then edge up to the Weſtwards towards the

Bay, until that you ſee that foreſaid little Iſland, with the two little ſhort Towers at the Weſt Point; leave it on the Larboard ſide, and run in cloſe along to the Northwards of it, for it is very clean, but leave the Caſtle a great ways on the Starboard ſide, being fowl about it. Being come within the little Iſland at the Weſt Point, you ſhall ſee within it a great Sandy Bay, Ankor there in 7 or 8 Fathom. Eaſt Southeaſt, and Southeaſt winds do blow there open in, for all other winds you lie there Land-lockt.

Lands-end of England

Four Leagues to the Weſtwards of *Mounts-Bay* lyeth the *Lands-end* of *England*, and lyeth from the *Lizard* Weſt Northweſt, diſtant 9 or 10 Leagues. About a League Southeaſt from the *Lands-end*, and half a League without the Land, lyeth a ſunken Rock, which at low water cometh above water. Thwart of that Rock ſtandeth a Church upon the Land, when you can but even ſee that over the high Land, then are you thwart of the foreſaid Rock, *viz.* even as far from the Land as the Rock; but when the Church is hidden behind the high Land, that you cannot ſee it, then are you nearer to the Land, than to the Rock, or within the Rock towards the Land, and ſo you ſhall go through betwixt it and the Land.

Upon the *Lands-end* of *England* lie two round Hills, when you get ſight of them, you ſhall ſee upon the higheſt a Spire Tower, coming ſomewhat nearer, you ſhall ſee upon the outermoſt end in the low Land, another Spire Tower, thereby is the *Lands-end* reaſonable well to be known. The Ground is thereabouts whitiſh Sand, with red Sand, and mingled with ſhells.

From the *Lands-end* unto the Cape of *Cornwal*, or to the little Iſland *Breſam*, lyeth the Coaſt moſt North about five Leagues.

Rocks on the Lands-end.

At the *Lands-end* lie ſome Rocks, you may run in within them, as well to the Northwards as to the Southwards, and come to Ankor in 8 or 9 Fathom: to come in there from the Southwards it is narroweſt, and 10 Fathom deep: from the Northwards it is beſt and broadeſt, and 8 and 9 Fathom deep; but on the left ſide cloſe to the North Point of the *Lands-end* lyeth a ſunken Rock, which you muſt avoid when you Sail in there.

Silly

Silly lyeth from the *Lands-end* West Southwest, distant 8 Leagues: but from the *Lizard* West 16 or 17 Leagues.

Between the *Lands-end* and *Silly* lie the Seven Stones West, and West and by South 4 Leagues from the *Lands-end*, and Northeast and by East, and East Northeast almost 3 Leagues from *Silly*; that is, a Ran of Rocks which come not above water, but always breaketh upon them. *Seven Stones.*

South Southwest, and Southwest and by South 3 Leagues from the *Lands-end*, and 4 Leagues East from *Silly* lyeth also a sharp Rock called the *Guf*, which cometh at half Tide above water, and is round about indifferent clean. *The Guif.*

Silly is divided into divers Islands; along the West side lyeth a great multitude of Rocks, Men may go in there through divers Channels or Sounds, but the Southern Channel is the best. About the midst of the entry of that Sound or Channel lyeth a sunken Rock, Men may go in on both sides of it, but to the Eastwards of it, it is broadest and best. For to Sail in there coming from the East, you must run along by the East Land in 8 or 9 Fathom, and you shall so run along to the Eastwards or that foresaid sunken Rock, which lyeth against a Sconce a little without the Castle. The Marks to avoid this Rock, are two Rocks which lie on the West side within the Haven, the one, *viz.* the innermost, is somewhat greater than the other. If you bring them one in the other, or the Northermost a little to the Eastwards of the Southermost, or the smallest, so that you may even see through between them; and Sail so right in, and keeping them so, you shall Sail far enough to the Eastwards of the Rock. If you come from the Southwards or the Westwards, and are bound into *Silly*, then run towards the East Land so long, until you bring the two foresaid Rocks within the Haven one in the other, or even through one another; Sail then in, and then you shall run (as before is said) clear of the foresaid Rock thwart of the Sconce. At the inner Point of the Island at the East side of this Southern Channel, lyeth another sunken Rock, whereof Men must take heed. For to avoid it, you must run so long to the Northwards upon the Marks of the foresaid two Rocks, until you may see the little Tower in the *For to Sail into Silly.*

Sandy Bay, then go to the Eaſtwards unto the Bay, and Ankor there in 8 or 9 Fathom. When you come near *Silly* upon the South ſide, you ſhall ſee a ſquare Tower in the Sandy Bay or Valley, and to the Weſtwards many little Rocks. The Ground of *Silly* is ſomewhat ſtonie, with ſome red Shells.

Of the Depths and many ſorts of Grounds before, and in the channel between Silly, *and* Uſhant, *and thereabouts.*

Seams. SOuthweſt and by South from the *Seams* Seven Leagues, it is deep 72 Fathom; the Ground pale, white, courſe Sand, like ſmall fretted little Stones, and white gliſtering Needles; Sail from thence North, and North and by Eaſt, and then you ſhall well to paſs with *Uſhant*.

About two Leagues Southweſt from the *Seams*, it is deep 52 Fathom; the Ground there is white, yellow, rough, and ſomewhat longiſh Sand, with a little red ſmall ſhelly Sand, with many gray crompled things, and ſome ſmall with gliſtering Points of Needles. If Men did find there 70 or 80 Fathom, they would judge it to be good Channel Ground.

Seams. . Weſt Southweſt from the *Seams*, ſo far from the Land, as Men may but euen ſee the Sheets from the Poop with clear ſight, it is 54 Fathom deep; the Ground is red, yellow, white and black pieces, like parings of Cheeſe, and a little courſe red Sand mingled withal.

Seams. Weſt and by South 8 or 9 Leagues from the *Seams*, is 65 Fathom; the Ground is white, yellow, with a little red ſmall ſhelly Sand, with ſome pieces of Shells and Queens, not very great, with much white and yellow ſomething long Sand, and ſmall things like points of Needles, like as Men find in the Channel.

Seven

Seven Leagues Southweſt from *Uſhant*, or thereabouts, that Men may even ſee it from the Poop, having clear ſight in 70 Fathom; there the Ground is white and yellow courſe Sand, with ſome pieces of Queens ſhells, and ſome pieces of white thin ſhells, with ſome gray flat ragged Stones. *Uſhant.*

Southweſt and by Weſt from *Uſhant*, about 19 or 20 Leag. in 78 or 80 Fathom, the Ground is white and yellow courſe Sand, with ſmall gliſtering Needles, with white pieces of Queens ſhells, and gray, and yellow flat Stones, and little pieces, like as if it were Oyſter-ſhells. *Uſhant.*

Weſt and by South from *Uſhant* 21 Leagues, in 68 Fathom, the Ground is red, yellow, and black, mingled with a little white round ſmall Sand, like ſhelly Sand. But in 80 Fathom, 21 Leagues Weſt and by South off from *Uſhant*, the Ground is yellow, and ſhelly, with ſome gray and crompled little Needles, like ends of ſmall Rie. *Uſhant.*

In 80 Fathom, 24 Leagues from *Uſhant* Weſt and by South, Men find rough great Sand, with many ſorts of Shells, red, white, yellow, and gray, with pieces of Queen ſhells. *Uſhant.*

From *Uſhant* Weſt 16 or 17 Leagues, in 75 Fathom, the Ground is white and yellow courſe Sand, with pieces of thin white ſhells, and gray pieces of Queens ſhells, like as if it were of Oyſter-ſhells, white ſmall gliſtering things like Needles.

Eight or nine Leagues from *Uſhant* it is deep 70 Fathom, the Ground red, white, yellow, and gray ſhelly Sand, with red, yellow, and black pieces of ſhells, and ſmall red, yellow, black, and gray Stones, with ſome ſmall white things like Needles.

Eight and forty Leagues Weſt and by North from *Uſhant*, and 50 Fathom Weſt Southweſt from the *Lizard*, or thereabouts; it is deep 95 Fathom, the Ground red, yellow, and black Sand, with ſmall white round ſhelly Sand, and ſome little pieces of ſhells, and Queen-ſhells, with ſome pieces of thin ſhells. *Uſhant.*

Three and thirty Leagues Weſt and by North from *Uſhant*, and 27 Leagues Southweſt and by South from *Silly*, in 95 Fathom, the Ground is gray, red, and yellow, mingled with ſmall black

black Sands, with dark, red, white, and yellow pieces of shells, *viz.* gray and red shelly Sand. An East Northeast Course from this Ground off, is the best; it is in the height of about 49 Degrees.

Ushant. Four and twenty Leagues West, or West and by North from *Ushant*, and South and by West from *Silly* 21 Leagues, in 80 Fathom, there the Ground is white, gray, red, and yellow fine small shelly Sand, with little red and white pieces of little shells, like bruised Mustard-seed in the height of 49 Degrees.

Ushant. Seven or 8 Leagues West, and West and by North from *Ushant* in 68 or 70 Fathom, there the Ground is white and yellow, small shelly Sand, mingled with many gray crompled little things like Needles.

Ushant. About 30 Leagues somewhat more Northerly from *Ushant*, in 90 Fathom, the Ground is small, white, rough, and somewhat long Sand, mingled with a little red and yellow, and some glistering little things like Needles, with 2 or 3 pieces of white gray shells. If you go on from thence Northeast and by North until you come in 55 Fathom, there the Ground is yellowish, white course shelly Sand with white pieces of shells; then you may see *Silly* lie 9 or 10 Leagues North, or somewhat more Westerly from you.

Ushant. West Northwest from *Ushant* 21 Leagues, and Southwest
Lizard, and by South from the *Lizard* 27 Leagues, in 80 Fathom, the Ground is gray, and red shelly Sand; there cometh also on the Lead a little piece or two of white or gray Queen shells, with yellow and red pieces of shells, also pieces of Perriwinkles.

Ushant, Nine Leagues Northwest and by North from *Ushant*, the Ground is white, and yellow, rough shelly Sand, with gray crompled glistering little things like Needles, there cometh also on the Lead little things like small straws. If you go on Northeast from thence, you shall fall with the *Steart*.

Twenty Leagues Northwest and by North from *Ushant*, and 16 Leagues Southwest somewhat Southerly from the *Lizard* in 68 Fathom, the Ground is white, yellow, and red small round Sand, with some white glistering little things like Needles, with 1 or 2 little gray crompled things like Needles, and 2 or 3 little pieces of little white shells.

Nine-

Nineteen Leagues North Northweſt from *Uſhant*, and 12 or 13 Leagues South Southweſt from the *Lizard*, it is 68 Fathom deep; the Ground is there all manner of ragged Stones, gray, red, and black, with red pieces of ſhells, and ſome gray crompled little things like Needles. *Uſhant*, *Lizard*,

Nineteen Leagues North and by Weſt from *Uſhant*, the South from the *Lizard*, it is deep 62 Fathom, the Ground is white and courſe ſhelly Sand, with white and gray crompled little things like Needles, with white pieces of ſhells, and 2 or 3 little Stones amongſt it. *Uſhant*,

Twelve or 13 Leagues Weſt from *Silly*, or ſomewhat more Northerly, it is 60 Fathom; the Ground is gray and Oaſie, mingled with ſmall black Sand. In ſome places of the ſame depth, it is white, gray Oaſie ſmall Sand, with pieces of thin white ſhells amongſt it, with a little piece or two like parings of Cheeſe: this Ground cannot be gotten up with Candle Tallow, or other hard Tallow upon the Lead, but with ſoft Tallow or Butter. In theſe depths you have no where ſuch Oaſie Ground as there, whereby Men may well know that they are on the back ſide of *Silly* or *England*, (to wit) Weſt from *Silly*. *Silly*,

Weſt from *Silly* 6 Leagues, it is Oaſie gray Sand, with 2 or 3 little pieces like parings of Cheeſe. *Silly*,

Seven or 8 Leagues South Southweſt from the *Lizard* in 16 Fathom, the Ground is white groſs, with a little red Sand, with little ſhells, and little white glittering things like Needles Nine or 10 Leagues South & by Weſt from the *Lizard* in 60 Fathom, the Ground is yellow pieces of ſhells, and gray pieces of ſoft flat Stones like parings of Cheeſe, with ſome red pieces of ſhells, without any Sand therein.

Southweſt and by Weſt from the *Lizard*, and South Southweſt from *Silly* 19 Leagues, it is deep 78 Fathom, the Ground gray, yellow, and red ſhelly Sand, with red, yellow, and blew pieces of ſhells, with Queen ſhells, and a piece or two like parings of Cheeſe, or like pieces of Oyſter-ſhells, with alſo 2 or 3 gliſtering little things like Needles, in the height of about 49 Degr. and 30 Minutes. *Lizard*, *Silly*,

Fifteen

Steart. Fifteen or ſixteen Leagues South-weſt and by South from the *Steart* in 57 or 58 Fathom, the Ground is full of pieces of all manner of ſhels, and Queen ſhels, with a little yellow and white ſhelly Sand, with many ſorts of little Stones, and gray little pieces like parings of Cheeſe, with ſome crumpled, and ſome not crumpled, but little gliſtering things like Needles, and little things like Maggots that are in Bacon.

Steart. South Southweſt from the *Steart* 16 Leagues in 53 Fathom, the Ground is white reddiſh ſhelly Sand, with pieces of Queen ſhels, with red gray little ſtones.

Southweſt from the *Steart* 8 Leagues, it is deep 40 Fathom, the Ground gray and red ſhelly Sand.

South Southweſt from the *Steart* 13 or 14 Leagues, it is deep 47 Fathom, the Ground pale muddy Sand, with little long things, and little Stones.

A great kenning South Southeaſt from the *Steart*, it is deep forsy Fathom, the Ground red Sandy Clay with pits in the Tallow.

Steart. Southweſt 11 or 13 Leagues from the *Steart* in 50 Fathom, the Ground is white and yellow ſmall ſhelly Sand, with ſome pieces of white ſhels, with gray and crumpled, and alſo gliſtering little things like Needles. In fine, he that ſoundeth much, getteth many and divers ſorts of Grounds, and ſometimes great change in little diſtance of place. But he that Soundeth, and findeth white ſhels, with little things like Straws or Needles, it is certain that he is neareſt to *Uſhant*: but if he find brandy Ground, or black little Stones mingled with white little things, then is he neareſt to *Silly*.

Marks of Uſhant & Silly. He that Soundeth thwart off *Uſhant*, and findeth ſmall white Sand, and little ſhels, and ſmall little things oaſie and white. *Uſhant* ſhall then lie Northeaſt from him. If he find long ſmall little things like Needles, then ſhall *Uſhant* be Southeaſt from him. But if he be not ſure of theſe Grounds, then he ſhall bear to the Northwards. And if he find deeper water, then he is towards the *Seams*; but if he find it ſhoaldy, then he is in the entring of the Channel to the Northwards of *Uſhant*. If he be between *Uſhant* and the *Seams* in 70 Fathom, he ſhall find the Ground

Ground to be little ſmall ſtones like black Sand of the Earth: or elſe if he find the Ground to be great red Sand, then he muſt ſtand to the Northwards, until that he find the fine white ſandy Ground, and long ſmall things, then he may hold himſelf certain to be in the entring of the Channel.

From the *Lands-end* of *England*, to the Cape of *Cornwal*, the Coaſt lyeth North about 5 Leagues, but *Silly*, and the foreſaid Cape lie Southweſt and Northeaſt, diſtant about nine Leagues. By the Cape lyeth a little Iſland or Rock called *Brejam*, betwixt it and the Cape Men may Sail through. *I. Breſan.*

From the Cape of *Cornwal*, unto the little Town St. *Yves*, lyeth the Coaſt about Eaſt and by North, and Eaſt Northeaſt 5 or 6 Leagues. St. *Yves* lyeth upon the Weſt Point of a great Bay, which is about 2 Leagues broad. At the Eaſt Point of the Bay lyeth a little Iſland; there lyeth off from it a great ledge of Rocks, a great half League thwart off into the Sea, whereof many of them come at half Ebbe above water; therefore he that cometh off from the Cape of *Cornwal*, and will Sail along the Coaſt towards *Stoupert* or *Padſtow*, muſt keep off (thwart of this Ledge) at leaſt a great League from the ſhore, becauſe of the foreſoid Rocks; betwixt that foreſaid little Iſland at the Eaſt Point of the Bay, and the main Land; it is alſo at many places Rocky and foul, ſo that one that is not there very well acquainted, may not Sail through there without great danger. In the Bay of S. *Yves* is on both ſides good ſandy Ground, where Men may Ankor all over, and come ſo near the ſhore, as they will. At the Weſt ſide of the Bay at the Town, is a Head where ſmall Ships and Barques do go in within it, and lie there ſuccoured for Northerly winds, but great Ships may not do ſo, they muſt Ankor without in 6 or 7 Fathom. *S. Yves.*

From St. *Yves* to *Hartland* Point, the Courſe is Northeaſt 17 or 18 Leagues; betwixt them both about half way lyeth the Point of *Stoupert*; to the Eaſtwards of it lyeth *Padſtow* in a Bay, where is a very good Road in 7 or 8 Fathom. At the Weſt ſide of that Point lyeth a ſunken Rock under water, and upon the Point a great high Rock, to the Weſtwards of that Point towards S. *Yves*, are many white Sandy and Chalky Bays *Stoupert, Padſtow.*

along the Shore, whereby the Coast there is very easie to be known.

Hartland-Point. *Hartland* Point, is a Point that lyeth out, 4 Leagues North from it lyeth the Island *Londey*, which is somewhat a long Island, it lyeth most North and by West, and South and by East. At the East side of that Island Men may ride for Westerly Winds in 14 or 15 Fathom, but on the West side the Ground is foul.

Four Leagues to the Eastwards of *Hartland*-Point, East Southeast from the South end of *Londey*, lyeth the Sound of *Biddiford*, *Biddiford*, being a broad Haven, where many Ships do Sail in and out. A little within the mouth of the Haven, it divideth it self into two Rivers; upon the Westermost on the Starboard side lyeth *Biddiford*, and upon the Eastermost on the Larboard side *Barnstable.* lyeth a Town called *Barnstable*.

From the Point to the Northwards of *Biddiford-haven*, unto *Ilford-Comb*, the Course is East Northeast 4 Leagues; that is a Haven where remaineth at low water 3 or 4 Fathom deep. Before the Haven is also a good Road, in 8 or 9 Fathom at half Flood.

Ilford-comb Eleven or 12 Leagues to the Eastwards of *Ilford-Comb*, lie two little Islands, about two Leagues North and South one from *Flat-holm.* the other, called the *Holmes*; the Northermost is called the *Flat-* *Steep-holm* *Holms*, and the Southermost the *Steep-Holm*; betwixt *Ilford-Comb* and the *Holmes* (somewhat nearer the *Holmes* than *Ilford-comb*) lyeth a Town called *Mincard*, where many Ships do lade.

In the fair way betwixt *Ilford-comb* and the *Holmes*, on the *English* side, on the one side and the Banks on the *Welsh* side on the other side, in the midst of the Channel it is deep, 30, 25, 20, 18, 16, and 15 Fathom, the nearer the *Holmes*, the shoaldier water. When Men come from the Westwards within the Island *Londey*, then they may see the Land on both sides, (*viz.*) of *England* and *Wales*. The *English* Coast even from the Cape of *Cornwal* to the *Holmes*, is altogether clean; but the Coast of *Wales* is most all foul and shoaldy, from the Island *Caldy* unto *Bristow*, with many Banks, Sands, and Riffs that lie off. The *Holmes* and the Island *Londey* lie West Southwest, and East Northeast, distant 19 Leagues.

He

He that will Sail from *Londey* to *Briſtow*, muſt run along by the *Engliſh* Coaſt, until that he come within the Point of the *Naes*, for to avoid *Naes-ſand*, and then forth along through between the *Holmes*, leaving the *Steep-holm* on the Starboard, and *Flat-holm* on the Larboard ſide. Men may alſo with little Ships of ſmall draught, Sail about to the Southwards of the *Steep-holm*; but it is there ſo ſhoaldy that there remaineth at low water no more than 2 Fathom water. Under *Steep-holm* Men may Ankor where they will in 4 or 5 Fathom.

Roadunder Steepholm

He that cometh off from the *Naes*, and is bound to *Briſtow*, muſt ſtand over to the *Steep-holm*, and run along to the Northwards of it. It lyeth from the *Naes* Eaſt Southeaſt about 7 Leagues.

For to Sail through between the *Holmes*, the right and beſt fair way, you muſt Sail neareſt the ſide of the *Flat-holm*, there it is deepeſt; with an open wind Men may Sail along ſo near by it without any hurt, that they may caſt with a ſtone upon it. Within, or to the Eaſtwards of the *Holmes*, lyeth ſhooting off from the Eaſt Land, a great ſhoald, lying off with a great Tail towards the Weſt, which (coming from the Weſt) Men might eaſily Sail within. For to avoid it, you muſt ſet the *Flat-holm* (when you are paſt it) Southweſt from you, and keep it ſtanding ſo, until that you ſhall have Sailed about a great League; look out then for a little Iſland, that ſhall then at the Eaſt ſhore lie near about thwart from you; upon it ſtand two Mils, and above upon the main Land ſtandeth one Mill. When the Mill that ſtandeth upon the high Land cometh to the Weſt end of that foreſaid Iſland, you ſhall be paſt the foreſaid Tail of the *Engliſh* Grounds, and cannot Sail within it; go then Eaſt Northeaſt along by the *Engliſh* Grounds, which are flat, ſo that you may Sail along by them upon your Lead in 3 or 4 Fathom ſo near as you will. When then the Mill that ſtandeth upon the high Land cometh between the foreſaid two Mills which ſtand upon the little Iſland, then ſhall you be altogether paſt the *Engliſh* Grounds, run then boldly towards the *Engliſh* Coaſt, and ſo cloſe along by it, as you pleaſe, towards *Paſſis* or *Portſhut* Point. From the *Flat-holm* to *Paſſis* Point in the right

For to Sail through between the Holmes.

Marks of the Engliſh ground.

fair way, it is deep 14 and 15 Fathom. The *Welſh* ſide you muſt ſhun, and take very good heed of it, becauſe it is very uneven and full of ſteep Banks that are needle to, which at many places do fall dry at low water, you may not come nearer that Coaſt than in 12 Fathom, for (ſailing towards it) you ſhall have at one caſt 10 Fathom, and before you can heave the Lead again, you ſhall ſit faſt, along from *Flat-holm* until you come to *Briſtow*. About *Paſſis* Point Men do Ankor in *Kings-road*, which is between the Point and the River of *Briſtow*, neareſt the River there is good Clay Ground in 8 or 9 Fathom. They that are bound into the River are brought in by the Pilots. Men may from thence alſo Sail in along by the Coaſt of the River of *Severn*, which is alſo like the River of *Lr ſtow*, a fair River to ſail into.

Kings-Road,

For to ſail from *Briſtow* to *Londey*, you muſt go away from *Paſſis* Point Weſt Southweſt, until that the *Flat-holm* do come to bear Southweſt from you, or elſe until that the three foreſaid Mills upon the South Land do ſtand alike far one from the other, *viz.* that which ſtandeth upon the high Land, do ſtand in the midſt between the other two, ſail then right with the *Flat-holm*, and very cloſe along to the Southwards of it; and being paſt it, go then forth Weſt Southweſt unto the Iſland *Londey*.

About 3 Leagues to the Northwards of *Flat-holm* lyeth the Town *Cardiff* in *Wales*, being a Tide-haven, before it is a good Road, as well for Ships that are bound to the Weſtwards, as to the Eaſtwards, where Men may lie Land-lockt almoſt for all winds; to the Eaſtwards and to the Northwards of it lie many Sands and Banks, which fall dry at low water, and ſo that they make Men Land lockt for Northeaſt and by Eaſt winds. He that is bound into the Road before *Cardiff* coming from the Weſt, muſt run in betwixt *Flat-holm* and the Point of *Cardiff*, lying ſomewhat to the Southwards of *Cardiff*, and being come about the Point, then to the Northwards up along by the ſhore unto Road.

Cardiff,

Cloſe up to the Point of *Cardiff*, (*viz.*) to the Weſtwards of it, lie two little Iſlands, the one next to the Point, is called *Silly*, and the Weſtermoſt *Barry*: Betwixt *Silly* and *Flat-holm* lyeth

Silly, Barry,

lyeth a Rock, Southeaſt, and Southeaſt and by Eaſt from the Point, which muſt be avoided when you will ſail through there unto the Road of *Cardiff*. When it is high water, you may ſail over all that which at half Ebb cometh not above water.

About 5 Leagues Weſt from the Point of *Cardiff* lyeth the *Naes*; to the Weſtwards of it the Land falleth away firſt about Northweſt, then afterwards Southweſt, or Southweſt and by Weſt, and ſo maketh a great Bay betwixt the *Naes* and *Wormſhead*, where there are very good Roads for Weſt, North, Northeaſt, and Eaſt winds. *The Naes.*

From the *Naes* a little from the ſhore lyeth a great Bank, called *Naes-ſand*, which lyeth off from thence Weſt and by South, and Weſt Southweſt at leaſt 5 Leagues into the Sea. From *Wormſhead* likewiſe lyeth off a Bank which is very ſteep, called *Helwix*, about 4 Leagues South Southweſt, and Southw. and by South into the Sea; they that come from the Eaſtwards, and will go to ride in the Bay betwixt the *Naes* and *Wormſhead*, run along cloſe by the Point of the *Naes*, through betwixt the *Naes* and *Naes-ſand*; Likewiſe they that come from the Weſtwards, and are bound in there, may run through cloſe along by the Point of *Wormſhead* and the *Helwix*, it is betwixt them both about an *Engliſh* Mile broad. He that cometh out of the Sea, may come in between the foreſaid Sands or Banks, it is there wide and broad. *Naes-ſand.* *Helwix.*

Wormſhead is a Point lying far out, appearing afar off almoſt like the *Old-head* in *Ireland*, but it is above or under, and goeth ſloping down towards the North; it hath in many places Chalky ſpots, whereby it is very eaſie to be known. *Wormſhead*

About 4 Leagues to the Weſtwards of *Wormſhead* lyeth the little Iſland *Caldy*, whereupon ſtandeth a white Tower, ſhewing off at Sea like a white Sail, which is ſet there for to know the Land by. *Caldy.*

Betwixt this Iſland, and the Point of *Wormſhead*, the Land falleth away with a great Bay to the Northwards, unto *Carmarthen* and *Tinby*; in this Bay it is all over good Ankor Ground for to ride. On every ſide of the Iſland *Caldy* Men may alſo Ankor, and have ſhelter for all winds. A little to the Northwards

Wullox. wards of *Caldy* lyeth a ran of ſunken Rocks, called *Wullox*. He that will ſail about to the Eaſtwards of the Iſland to *Tinby*, may run cloſe about by it up to the Weſtwards, through betwixt the Iſland and the ſunken Rocks, leaving them on the Starboard ſide, or elſe he may run along alſo to the Eaſtwards and to the Northwards of the ſunken Rocks, leaving them on the Larboard ſide, and ſo then alſo to *Tinby*, and Ankor there before the Town in 5 or 6 Fathom. To the Eaſtwards, and to the Northwards of the foreſaid Rocks, it is alſo good Ankorage in 6, 7, or 8 Fathom; it is there all clean Ground, and far off ſhoald water. Men may alſo ſail through to the Weſtwards of the Iſland *Caldy*, (which is between the Iſland and the Point of the main Land) to *Tinby*; but it is there narrow, yet clean, and deep enough.

River of Carmarthen. The River of *Carmarthen* lyeth from the Iſland *Caldy* North-eaſt and by North, diſtant about 4 Leagues; the Channel for to Sail in there lyeth in Eaſt Northeaſt; on the Eaſt or South ſide lyeth a great Bank, which lyeth off far from the ſhore, and on the off-ſide goeth off flat. For to ſail in there, Men may Sound it in along by the Eaſt or North ſhore, until they be over the ſhoaldieſt of the Bar: there is upon it at half Flood about 14 Foot water; and being over the Bar it will be again 4 Fathom deep, or thereabouts, then they may run in forth by their Lead along by the South ſhore, until they come within the River.

S. Gawens Point. Four or 5 Leagues to the Weſtwards of the Iſland *Caldy*, lyeth St. *Gawens* Point, the South Point of *Wales*, by ſome called the *White-Point*. About half an *Engliſh* Mile South South-weſt from this Point lyeth a ſunken Rock, called the *Crow*, *The Crow.* whereof Men muſt take heed.

Milford-Haven. Two Leagues to the Weſtwards of St. *Gawens* Point lyeth the Haven of *Milford*, a broad and wide Sound, lying in at the entry Northeaſt in; being come in within the Points, Men may go up to the Northwards, Eaſtwards, and Southwards, unto divers places and Roads. About by the North Point, Men may ſail unto *Dale-road*, there it is good lying in 3 Fathom, and 3 Fathom and an half at low water. When Men come a little within the South Point in the open of *Milford* Haven, there lyeth

eth a little Iſland or Rock like the *Newſtone* by *Plimouth*; being paſt that a little, they may run to the Southwards into a Bay, where they may lie Land-lockt for all winds.

A little to the Weſtwards of *Milford* Haven lie 2 little Iſlands, the Southermoſt is the ſmalleſt, called *Stockholm*, and the Northermoſt *Scaline*. About 2 Leagues North Northweſt, or Northweſt and by North from thence lyeth the Iſland *Ramſy*, there betwixt them hath the Land a great Bay, called the *Broad-Bay*. *Ramſey* lyeth at the North Point, and *Scaline* at the South Point of the Bay; there in along the ſhore is good riding for North, Northeaſt, Eaſt, and Southeaſt winds, in 7, 8, and 9 Fathom. Upon the North Point of this Bay lyeth a little Town, called St. *Davids*; to the Northwards of it lyeth the Coaſt of *Wales* along Northeaſt unto *Cardigan*. *Stockholm.* *Scaline.* *Ramſy* *Broad.* *St. Davids*

About 2 Leagues Weſt and by South to Sea-wards from the Iſland *Scaline*, and 3 Leagues to the Southwards from *Ramſey* lyeth that little Iſland *Graſholm*, which is a round clean Rock, and about 4 Leagues off from it lie alſo 2 little Lands, which are foul, called the *Smalles*. The lying of them, with the dangers thereof, you may read in the Deſcription of *Ireland*. *Graſholm.* *Smalles.*

On the Northweſt ſide of the Iſland *Ramſey* lyeth the *Biſhop*, with his *Clearks*; theſe are Rocks that lie off to the Northwards, and Southweſtwards of that Iſland a good way to Sea. About 5 Leagues Northweſt, or ſomewhat Northerly from *Ramſey* lyeth another great Rock called *Maſcus*, which is all round about foul, with many ſunken Rocks. He that cometh to ſail thereabouts, or to lie by, muſt take very good heed of them. *Biſh. with his Clearks* *Maſcus.*

The Iſland of *Ramſey*, or the North Point of *Wales*, and the Southeaſt Point of *Ireland*, lie about Eaſt Southeaſt, and Weſt Northweſt, 16 Leagues.

Of the Tides and Courſes of theſe Streams.

IN *Mounts-Bay*, and at the *Lands-end* of *England*, a Weſt Southweſt, and Eaſt Northeaſt Moon maketh high vvater.

In *Silly*, a Southvveſt and by Weſt Moon maketh full Sea.

A Sea board off *Silly* in the Channel, likevviſe a Southvveſt and by Weſt Moon.

In the entring of the Channel, a Southvveſt and Northeaſt Moon.

From *Silly* to the *Lizard*, the Flood falleth Northeaſt, and the Ebb Southvveſt.

Betvvixt *Silly* and *Londey*, the Flood falleth Northeaſt, and the Ebb Southvveſt.

On the Coaſt of *England* betvveen the Cape of *Cornwal* and *Hartland*-Point a Weſt Southvveſt, and Weſt and by South Moon maketh high vvater.

Thwart of the Iſland *Londey*, a Weſt and by South; but on the Iſland, an Eaſt and Weſt Moon.

At the Iſland *Londey*, and at the *Holmes*, an Eaſt and Weſt Moon maketh high water.

At *Briſtow* within, a Weſt and by North Moon maketh full Sea.

At *Milford-haven* an Eaſt and by North, and Weſt and by South Moon maketh high water.

In the Channel of *Briſtow*, betwixt *Londey* and the *Holmes*, the Flood falleth E. N. E. and the Ebb W. S. W

Within the *Holmes* towards *Briſtow*, the Flood falleth Northeaſt and by Eaſt, and the Ebb Southweſt and by Weſt.

Betwixt *Londey* and *Milford*, the Stream falleth Northeaſt, and Northeaſt and by Eaſt.

Of

Of the Depths.

MEn may ſee on *Silly* the South ſide in 52 Fathom, and the Ground there is ſtony, with ſome red ſhels.

The *Lands-end* of *England* Men may alſo ſee in 25 Fathom.

Silly may be ſeen on the North ſide in 45, 46, and 48 Fathom, there the Ground is Oaſie, with ſome little ſtones amongſt it.

When Men are to the Northwards of *Silly*, it ſheweth firſt in two Iſlands; upon the Eaſtermoſt they ſhall ſee a Tower or little Caſtle: to the Eaſtwards of the 2 Iſlands, they ſhall ſee alſo 2 great hilly Rocks, and to the Weſtwards three high black Rocks.

Weſt Northweſt, and Weſt and by North 10 or 11 Leag. from *Silly*, the Ground is Oaſie and ſoft, that Men can hardly get any of it upon the Lead, there come ſome little ſhels amongſt it.

Betwixt the *Lands-end* of *England* and *Londey*, in the fair way, it is 45 Fathom deep: the Land of *Cornwal* Men may ſee in 44 Fathom.

Three or four Leagues without the Land thwart of St *Yves*, *Stoupert*, or *Padſtaw*, the Ground is ſharp and Rocky, but nearer the Land it is all Sandy Ground.

Betwixt S. *Yves* and *Hartland*'s Point, are many white chalky Hills along the Coaſt, eſpecially near by *Stoupert* or *Padſtaw*, whereby this Coaſt is to be known.

In the Channel betwixt the *Holmes* and *Briſtow*, it is deep 12, 13, and 14 Fathom, and Men may ſee the Land on both ſides.

Upon the Coaſt of *Wales* about *Milford*, and to the Northwards of it, Men may ſee the Land in 42 and 45 Fathom.

Of the Latitudes.

The South ſide of *Silly* lyeth in	50 *deg.* or a little more.
The Cape of *Cornwal* lyeth in	50 *deg.* 25 *min.*
Londey lyeth in	41 *deg.* 13 *min.*
The *Holmes* lie in	51 *deg.* 30 *min.*
Milford in	51 *deg.* 46 *min.*
The Iſland *Ramſey* in	51 *deg.* 50 *min.*

For to know the Courſes and Diſtances from place to place. See the Pilots Sea-Mirrour, *in* pag. 32, 33.

How theſe Lands do ſhew themſelves at Sea.

The Lands-end *ſheweth it ſelf thus, when you come in right within out of the Sea.*

The Lands-end *being Eaſt from you, ſheweth thus.*

Thus ſheweth Silly *being Eaſt Northeaſt from you.*

When

When Silly *is* Southeaſt *from you, it ſheweth thus.*

When the Iſland Londey *is* North *from you, it ſheweth thus.*

When the Iſland Londey *is* N. N. W. *from you, it ſheweth in this form.*

X DEMONSTRATION,

Of the Coaſt of IRELAND.

FRom the Lands-end of *England* to *Waterford*, the Coaſt is North Northweſt; but from *Silly* to *Waterford*, the Coaſt is North and by Weſt; ſomewhat Northerly 40 Leagues betwixt both; it is all Oaſie and ſoft Ground, 9 or 10 Leagues in the *Offing* from *Ireland*, lyeth a Sand Bank 40 Fathom deep, where commonly Fiſher-men lie to Fiſh; it is a certain mark of the diſtance of the Land, when in clear weather you have a ſight of the high mountain *Dungarvan*. If you Sail from the Lands-end of *England*, to the Northweſt Coaſt 43 Leagues, you ſhall fall before the River of *Cork-beg*, which is there a good way upwards at a low water 7, 8, 10 Fathom water.

The Hill of Dungarvan.

Cork-beg.

Four Leagues to the Eaſtwards of *Cork-haven*, lyeth an Iſland called *Ballecutin*, within it you may ride for Weſterly and Southerly winds in 4, 5, or 6 Fathom: *Cork* and *Youghal* lie Eaſt Northeaſt, and Weſt Southweſt, diſtant 7or 8 Leagues.

Ballecutin-Iſle.

Youghal.

The Haven of *Youghal* is a broad Haven, where you may go in at high water by the Eaſt-land; it lyeth in Northweſt, and Northweſt and by North: the Weſt ſide is a Sandy Strand all along the Town. About a League South and by Weſt from the Havens mouth of *Youghal*, lyeth a little Iſland called *Chappel-Iſle*; on the Eaſt ſide is a good Road.

Chappel-Iſle Iſle

Four Leagues to the Eaſtwards of *Youghal* lyeth *Dongarvan-haven*, betwixt both lyeth an out-Point: a little to the Eaſtwards of it ſtandeth a high black Tower called *Ardmore*, which may be ſeen well 4 Leagues at Sea; within it is a Bay, which is a good Road for Weſterly winds in 7 or 8 Fathom.

Ardmore.

Dungar-

Dongarvan is a narrow Tide-haven; the mouth of the Haven is full of Rocks; at low water it falleth dry: You muſt go in there at high water, and run in through betwixt the Rocks; it lyeth in North Northweſt, within it is deep enough.

The Town of *Dongarvan* lyeth on the Weſt ſide of the Haven; from *Dongarvan* to *Waterford* is 8 Leagues.

Within *Dongarvan* N.N.W. Land-wards lyeth the Mountain of *Sledges*, which is call'd the high Mountain of *Dongarvan*, or *C. de Quin*; it ſheweth it ſelf with three exceeding high Hommocks far above all other Lands thereabouts, and may be ſeen at Sea along a great part of the South Coaſt of *Ireland*. When you have that Mountain North Northweſt from you, and Sail right in with it, you ſhall fall right with *Dongarvan*: when you have it North from you, and Sail right with it, then you ſhall fall with *Youghal*; being North Northeaſt, then you ſhall fall with *Cork*; but when it ſhall be Northweſt, and then you run in, and you ſhall fall with *Waterford*. *C. Quin.*

The Haven of *Waterford* lyeth about 5 Leagues to the Weſtwards of the Southeaſt Point of *Ireland*, being call'd *Carnaroart*; the Coaſt betwixt both lyeth Eaſt Northeaſt, and Weſt Southweſt, and ſheweth it ſelf in the *Offing* within the Land, with high Hills 2 or 3 double one above the other; but by the Sea ſide it is all low Land, where you may ſee many flat Towers upon it as you ſail along by it; the Eaſt Point of the Haven is a low Rock-Point, but it is clean; upon it ſtandeth a high white flat Tower, called the Tower of *Waterford*, which you may ſee a far off at Sea, and is a perfect mark to know this Haven by. The Weſt Point is a high and foul Point, there lyeth a Shoal South Southeaſt off into the Sea in 10 or 11 Fathom deep in the Havens mouth 7 Fathom, in ſome, at farther end 6 Fathom: within this River, within the Eaſt Point is a good Road in 4 and 5 Fathom; there lyeth on the Weſt a ſteep Point, from thence beginneth a Shoal which lyeth to the Northwards along the Shore unto the ſteep Point of *Paſſage*, and ſhooteth over from that Point with a Tail towards the Shore. *Paſſage* is a Village where men paſs over, lying on the Weſt ſide of the River a little to the Northwards of the foreſaid ſteep Point. *Waterford.* *The Tower of Waterford.*

About

About half ways between the Haven of *Waterford*, and the Point of *Carnaroart* lyeth two little Iſlands about ½ a League from the Shore called *Saltees*, the Southermoſt is the greater, and lyeth diſtant from the Tower of *Waterford* directly Eaſt almoſt 3 Leagues; you may Sail through between theſe two Iſlands in 5, 6, and 7 Fathom, keeping neareſt to the ſmalleſt
The Saltees or Northermoſt Iſland, for to Sail between the *Saltees* and the main Land, you muſt leave two thirds of the diſtance of water from the Iſland, and one third part from the main, and you ſhall have at low water about 2 Fathom deep. About ½ a League without the Southermoſt Iſland of the *Saltees* lyeth a Rock a-
Kinbegh. bove water called *Kinbegh*, and Southweſt about ſo far from it, and South and by Weſt from the South end of the *Saltees*, lyeth
Kimor. a ſunken Rock called *Kimor*, it is ſo ſteep, that a man may lie with a Ships ſide againſt it, and have 14 Fathom water.

Eaſtwards of the Rock *Kinbegh*, and Southeaſt from the greateſt Iſland of the *Saltees* lyeth ſome ſunken Rocks, called
The Trails. the *Trails*, which may be ſeen at low water.

Northeaſt from the *Saltees*, lie alſo Rocks; the Southermoſt
Tuns and N. Rock. is called the *Tuns*, and the Northermoſt the North Rock.

North Northeaſt from the greateſt Iſland of the *Saltees*, or from *Kinbegh*, and Southweſt and by South from *Carnaroart*,
Black Rock lyeth one Rock above water, called the *Black Rock*, which is clean round about; but a quarter of a League Eaſtwards from
Barrel. it lyeth a ſunken Rock, called the *Barrel*, of that you muſt take heed.

For to avoid the foul Ground of the Tees. He that cometh out of *Waterford*, and will go about to the Southwards of the *Saltees*, muſt not go more Eaſterly than Eaſt Southeaſt, for to go cleer of the foul Grounds which lie to the Southwards of the *Saltees*, and when the *Saltees* ſhall be North off him, then lyeth the Coaſt from thence to *Tuſkar* directly Northeaſt, or a little more Eaſterly; for to go along without the *Tuſkar*, a man muſt go at leaſt Northeaſt and by Eaſt to go cleer of him.

The Tuskar. The *Tuſkar* is a great black ſmooth Rock, lying like a Ship turned up ſide down, but about twice ſo great: at the North ſide of it lie alſo two ſmall Rocks under water; the *Tuſkar* lyeth

lyeth from the Point of *Grenore* Southeaſt and by Eaſt, and Eaſt Southeaſt, and diſtant 1 League from the *Saltees*, North North-Eaſt 4 Leagues, and ½ from *Black Rock*, alſo Eaſt Northeaſt two Leagues and ½, and from the Lands-end of *England* North and by Weſt.

Southeaſt, and South, about 10 Leagues from the *Tuſkar* lie two little Iſlands cloſe one by the other, about 4 Leagues from *Graſholm*, called the *Smallees*, at high water, and Spring-Tides the water floweth over them, the Northermoſt is call'd *Skahum*, and the Southermoſt is call'd *Kamey*; between the *Smallees* and *Graſholm* lyeth a ledge of Rocks, which at low water may be ſeen; it is not without great danger to go through betwixt them both, eſpecially with Calms, by reaſon the Tides run very ſtrong there through: an Eaſt Southeaſt Moon maketh high water without the *Smallees*. *Smallees.*

From the *Tuſkar* Eaſt and by South about 8 Leagues, lyeth alſo a great Rock, with many ſmall Rocks round about it, call'd *Maſcuß*; he that cometh from *England*, and will Sail towards *Ireland*, muſt take great heed thereof, eſpecially, when as through Weſterly or Northerly winds he ſhall be driven a little to the Eaſtwards of the Coaſt. *Maſcus-Rock.*

For to Ankor under the Point of *Carnaroart* coming from the Weſt, you muſt take heed of coming nearer the Shore than 6 Fathom, until you be paſt the high Hill to the Weſtward of the Point, when you have brought the Hill to the Eaſtwards the length of a Capſton-Barr, you may Ankor in 9 Fathom, and good Riding. *Road under* Carnaroart

Coming out of the Sea about a League or two near unto *Grenore*, you ſhall ſee the ragged double Land high above the Point of *Grenore*, which (as is aforeſaid) is not very high, but flat on the top, by that ſaid high double ragged Land within, men do know the entrance into the Channel of *Wexford*; when you come from the Southwards and the Eaſtwards, when you have ſight of the Point of *Grenore*, you may boldly Sail in with it, until that ſaid double Land doth ſhew it ſelf about a mans length above the Point of *Grenore*, then are you far enough from the Shore, not to be in any danger of the Shoald of *Grenore*; *For to Sail in* Grenore

come

come no nearer the Shore than 6 or 7 Fathom, nor go no farther out than 8 or 9 Fathom depth, otherwiſe you ſhould come too near the Barr that lyeth to the Northwards of the *Tuſkar*, which on the inward ſide is very ſteep; upon it is no more than 12 Foot water, and cloſe by it 10 Fathom deep; if that you keep the foreſaid ragged high Land a mans length above the Land of *Grenore*, and ſo Sail to the Northwards, ſo along until that you bring that ſame high Land without, or to the Northwards of the Point of *Grenore*, and muſt yet Sail to the Northwards, keeping the Mill ſo that you may ſee the top of it over the ſteep Point of *Grenore*; Then as ſoon as you ſee a Caſtle (which ſtandeth a little without the Strand) come without the Point of *Grenore*, then may you Sail boldly towards it by your Lead into the Bay of *Grenore*: In the Bay it is Shoaldy water; you may lie there ſo near the Shore as you pleaſe in 6, 5, or 4 Fathom, and there you may get a Pilot to bring you to *Wexford*.

For to Sail out of Grenore *Bay.* For to Sail out of *Grenore*-Bay, you may run out ſo cloſe by the Shore, that you may but ſee the wings of the Mill over the Fore-land, and ſo go on Eaſt Southeaſt into Sea along by the Riff according as Wind and Tide ſhall be, ſo long until you ſhall ſee the Roof of the Mill, then you may go larger, and by little and little more Southerly, and then you ſhall ſee it ripple upon the Riff.

For to Sail to Wexford For to Sail out of the Bay of *Grenore* towards *Wexford* with a Ship that draweth little water, you may boldly run along by the Shore, and Sail through betwixt the *Hainmans path*, and the *Sonder*, that is a Channel, where at high water and ordinary Tides, is 8 Foot water, but with a Spring-Tide is 10 Foot.

The *Hainmans path* is a dry Sand, which makes the South ſide of the Channel of *Wexford*, lying off from the *Sonder*.

The *Sonder*, that is the South Point of the main Land of *Wexford Haven*.

If you would be upon the Bar of *Wexford*, and leave the Shoald of *Hainmans path* (*viz.*) to go the Northwards, obſerve theſe marks; At the North ſide of the Channel of *Wexford* lyeth a high Hill with a round Hammock, which is to be ſeen over the Fore-land, and a little Caſtle in the low Land, a little

little above the Strand, bring that round Hommock a little to the Northwards of the Caſtle, and Sail ſo in, but bring not the Hommock within, or to the Southwards of the Caſtle, for then you ſhall be in danger of the Sand of *Hainmans path*. But if you cannot ſee theſe Marks, nor diſcern them well, you may go about the Sand of *Hainmans path* by your Lead in 7 Fathom without any danger. In this Channel upon the Barr, an Eaſt and Weſt Moon makes higheſt water.

The Channel through the Banks before Wexford.

For to Sail from the Barr of *Wexford* within the Lands through towards *Dublin*, you muſt keep the Sounding of the Shore; run along by it in 6, 7, or 8 Fathom, but not go further from the Shore than 8 Fathom, leaſt you come foul of the Banks which are on the inward ſide, very ſteep and needle. When you Sail to the Northwards along the Shore a League from the Barr, you ſhall ſee 3 white Spots or Rocks on the Sand Hill; a little to the Northwards thereof ſtandeth a piece of Wall like a Pillar of a Church, right againſt this Pillar, a great Engliſh Mile from the Shore beginneth a Sand called *Buſk* and *Ram*, lying from thence along the Shore to the Northwards, it is beſt to keep the Shore, and to run through in 6 or 7 Fathom: right againſt this *Ruſk* and *Ram*, the Shore maketh a Bay unto the Point of *Glaſcarick*; when you are ſo far off this Point, then you are paſt the foreſaid Sand.

The Point of Glaskarick.

The Point of *Glaſkarick* is a low Point; to Sail from *Glaſkarick* to *Dublin*, run along by the Shore (which is ſomewhat full of Bays) in 6 7, and 8 Fathom: two great Leagues to the Northwards of *Glaſkarick* a great ½ Engliſh Mile from the Shore, lyeth a Sand call'd *Glaſkarmen*; an Engliſh Mile to the Northwards of *Glaſkarmen*, lyeth the Point of *Arklow-head*; Sailing through between the ſhore and *Glaſkarmen* to the Northwards, a man may ſee two Points, (viz.) *Miſen-head*, and to the Northwards of it *Wicklow-head*; if you keep *Wicklow-head* even within the Point of *Miſen-head*, then you can take no hurt of *Glaſkarmen*; but if you will Sail a Sea-board of the *Glaſkarmen*, then keep *Wicklow-head* a good ways without the *Miſen-head*, and then run along a Sea-board of it, and then you can take no hurt of it.

Marks to avoid Glaskarmen.

The Ledge of Arklow. At the North Point of *Arklow-head* lyeth a little ſtonie Ledge very ſteep and needle too, a man muſt take good heed of it, coming from the Northwards; and bound to the Southwards, you muſt come no nearer it than in 5 Fathom: at the North ſide of the Point of *Arklow* is a fair Sand Bay, there is good Ankor Ground in 8, 7, or 5 Fathom; in this Bay are good ſtore of Herrings caught.

The Bay of Arklow.

About two Leagues to the Northwards of *Arklow*, lyeth *Miſen-head* *Miſen-head*, it is a black Head betwixt *Miſen-head* and *Arklow*, in the fair way, it is 8 or 9 Fathom deep; it is all along good Ankoring, and clean Ground.

Wicklow-head. From *Miſen* to *Wicklow-head*, it is alſo two Leagues, but this reaches ſhorter than the other to *Arklow*.

Fourteen Engliſh Miles from *Wicklow* lyeth the Point of *Bray*, a high ſteep ſtrong Point, and high Land thereabout on the Sea Coaſt; within the Land lyeth a high Hill like a Sugar-Loaf, the fourth of the 3 Hills in the Land call'd the *Vineyards*.

Bray-head. *Bray-head* is very ſteep likewiſe, alſo the Ground by it is 10 Fathom deep cloſe by the ſhore: to the Northwards of the Point lyeth a little Tide haven, there ſtand the Houſes call'd *Bray* on the North ſide.

Dalkey-Iſland. From *Bray-head* to the Iſland *Dalkey* lying at the South Point of the Bay of *Dublin*, the Coaſt is North and by Weſt 4 Engliſh Miles, there betwixt both goeth in a Bay, at the Northeaſt ſide of the Iſland *Dalkey* lie ſome Rocks lying along the main, not far from it Men Sail within the Iſland thorough, and leave all the Rocks, and the Iſland lyeth to Sea-wards.

The Sound of Dalkey. The Sound between the Iſland *Dalkey* and the main Land, is call'd the Sound of *Dalkey*, it lyeth North Northweſt, and North and by Weſt, through it is 7, 8, and 9 Fathom deep.

Heath. The North Point of the Bay of *Dublin* call'd *Heath*, or *Hedenhough*, is a very high Point, it ſheweth a far off as if it were an Iſland, but is faſt to the main Land with a ſmall and very low neck; to the Northwards of it lie the Iſland *Irelands Eye*, and *Lambay*, thoſe may be ſeen to the Southwards of the Point of *Heath*, and being before the Point of *Dublin*, over that foreſaid ſmall neck of Land.

From

From the Sound of *Dalkey* to the Barr of *Dublin*, the Coaſt is North Northweſt, in the fair way it is deep 9, 8, 7, 5, and 4 Fathom, nearer the Barr it is ſhoaldier water; when you Sail up, you muſt keep the Weſtermoſt Rock that lyeth without the Iſland *Dalkey* a Hand-ſpikes length open of the Iſland, or the other Rocks; or you may Sail more to the Eaſtwards right towards the low Land of the Northward Shore, and then by your Head along by it to the Bar: from the South Shore runneth off a great Tail of Sand almoſt by the North Shore, to the Northwards of it goeth a Deep; in upon that Tail a little within the Point ſtands a Beacon of a Maſt made by the Engliſh men, call'd the *Pearſing*. *Pearſing.*

For to go clear of that, you muſt run ſo far to the Northwards for to avoid this Sand coming from the Southwards, look out for the Iſland *Irelands Eye*, keep that ſo that you may but even ſee it over the low Land, cloſe after it to the high Land of *Hoath*, ſo you can take no hurt of that Iſland; when the Tower of St. *Patrick* in *Dublin*, which ſtandeth on the Land-ſide of *Dublin* cometh right over that Beacon the *Pearſing*, then are you right againſt the Point of the Sand which ſhooteth a good way to the Northwards of the *Pearſing*; for to go clear of that, you muſt run ſo far to the Northwards, until the *Pearſing* cometh right over the Caſtle with 3 Turrets, which ſtandeth to the Southwards of the Town; or when the *Pearſing* cometh between that Caſtle and the Town, then are you above the Point of the Sand, then go in Weſt and by South, until you come over the ſhoaldieſt of the Bar; there is at a Spring Tide 15 or 18 Foot water, but at low water and Neap Tide, not above 6 Foot water. *Marks of the Land.*

If you are bound for *Dublin*, and would avoid the Sands and Banks that lie along the Eaſt Coaſt of *Ireland*, run then ſo far to the Northwards, until you can ſee the little Iſland (the *Irelands Eye*) without the Point of *Hoath* or *Hedenhough*, run then right on to *Hoath* or *Hedenhough*, and then you ſhall take no hurt of the North Grounds.

Of the Tides and Courſes of the Streams.

BEtwixt *Corkley* along the Coaſt before *Waterford* into the Point *Carnaroart*, the Flood falleth along the Coaſt Eaſt Southeaſt, and the Ebb Weſt Southweſt.

At *Waterford*, an Eaſt and by North, and a Weſt and by South Moon maketh high water.

On the Eaſt Coaſt of *Ireland*, to the Southwards of the Bay of *Dublin*, an Eaſt Southeaſt, and Weſt Northweſt Moon maketh high water.

At *Dublin*, a Southeaſt and Northweſt Moon.

Of the Depths.

FRom *Corkley* to the Eaſtwards of *Waterford*, you may ſee the Land in 24 Fathom: the moſt part of the South Coaſt of *Ireland* you may ſee it in 35 and 40 Fathom; in 35 Fathom you ſhall not be far from the Land, therefore come no nearer *Ireland* by night, than in 40 Fathom.

The Latitude.

Waterford lies in	52 *degr.* 30 *min.*
Dublin lies in	53 *degr.* 32 *min.*

For the Courſes and Diſtances, See Pilots Sea-Mirrour *in* pag. 35.

XI Demonstration.

Of the Northeast Coast of Ireland.

From the Bay of Dublin *to* Horn-head *Irelands eye*

THe North Point of the Bay of *Dublin* call'd *Heath*, is round about clean, ſo that a man may Ankor round about it; to the Northwards of it lie the Iſlands of *Irelands Eye*, and *Lambay*, *Irelands Eye* is the ſmalleſt, it lyeth between the foreſaid Point of *Heath* and *Lambay*; at the Weſt ſide of it ſtandeth a little Chappel, right againſt it you may ride; at the South end lyeth a little ſtrong Riff, which may be avoided.

Droghedah.

About 6 Leagues Northweſt and by North off *Lambay*, lyeth the Haven of *Droghedah*, and hath a crooked Haven, which is not good to come into without a Pilot.

Dundalk.

Four or 5 Leagues to the Northwards lyeth the Haven of *Dundalk*, which is Shoaldy and little uſed.

Carlingford

North and by Weſt 11 Leagues from *Lambay* 7 Leagues to the Northwards of *Droghedah* 2 Leagues from *Dundalk*, lyeth the Haven of *Carlingford*, the South Point is very foul with Rocks, and ſunken Rocks, which you muſt ſhun and run in by the Northern Shore; when you are within the ſunken Rocks, you muſt run over to the Sonthern Shore, and in along by it, until you come before the Town of *Carlingford*, and Ankor there in 6, 7, or 8 Fathom.

Green-Caſtle.

Green-Caſtle lyeth at the Northeaſt ſide of the Haven two Miles from *Carlingford*.

St. John's point.

About 7 Leagues Northeaſt from *Carlingford* lyeth a Point call'd St. *John* Point, about ½ wayes betwixt both lyeth the high Mountain of *Carlingford*; from S. *John's* Point lyeth off a ledge of Rocks, whereof you muſt take heed.

Arglas.

A great League to the Northwards of St. *John's* Point, lyeth *Arglas*: from thence to the Haven of *Strangford* is three ſmall Leagues.

For *Strangford*

For to Sail into the Haven of *Strangford*, you muſt leave the ſunken Rock which lyeth a little off of the South Point, on the Larboard ſide, and go to the Northwards of it; but you muſt take good heed of a foul ledge of Rocks on the North Point, when you come ſo far as *Audleys* Caſtles, there you may Ankor, or run in about to the Point on the Larboard ſide, and Ankor therein, about a League and a half to the Northwards of *Strangford* lyeth the Rocks, South Rock, and North Rock, betwixt them both a fair broad Sound, where a man may Ankor in 6, 7, or 8 Fathom deep.

Kopland-Iſles The *Kopland-Iſles* lie about an Engliſh Mile from the Land at the Eaſt Point of the Bay of *Knockfergus*; the North Point of *Knockfergus*, lie diſtant from the *Kopland Iſland* 3 or 4 Leagues Northweſt, or ſomewhat Weſterly.

The Bay of Knockfergus. The Bay of *Knockfergus* is a great broad Sound, about 3 Leagues inwards, in the Bay W. from *Kopland Iſles*, is the Road before *Knockfergus*, there is good Ankor Ground in 3 Fathom and a half ſomewhat farther to the North Point: on the North ſide of the Bay ſtandeth *Monſe-Hill* Caſtle; there is good Ankorage for North and Northweſt winds, but a South and Southweſt wind maketh a bad Road in thoſe places.

Cow-Iſland. To the Northwards of the N. Point of the Bay of *Knockfergus* lyeth a little Iſland call'd *Cow*, from thence lyeth the Coaſt of *Ireland* forth N. N. weſt about 9 or 10 Leagues into the Iſlands

The Maids. of *Raghlens*, betwixt them both lyeth the 9 *Maids*, which are great Rocks lying one great League without the Land, and two great Leagues to the Northwards of the Bay of *Knockfergus*; he that cometh from the fair Foreland, muſt at leaſt go Southeaſt and by Eaſt for to run clear of the fore Grounds at

Fair Foreland. *Raghlens*, or *Fair Foreland*, the Northeaſt Point of *Ireland*; *Scotland* and *Ireland* comes neareſt one to the other.

The Raghlens. The *Raghlens* is an Iſland that Men may Sail round about; at the Southweſt ſide is a fair Bay, where is good lying almoſt for all winds.

Skirris Portruſh. From *Raghlens* to *Skirris Portruſh*, the Coaſt is Weſt Southweſt, diſtant 7 Leagues: the *Skirris Portruſh* is a rocky Iſland, it hath on the South ſide a fair Bay, where you may lie in 6 or 7 Fathom

Fathom in clean and Sandy Ground Land-lockt for all winds, except the East Northeast wind : for to come under this Island from the East, you must go close by the Shore on the main Land to avoid the sunken Rocks call'd the *Chickens*.

Three Leagues West and by North off *Portrush*, lyeth the Haven of *Loughfoil*, before it lyeth a great plate of Sand call'd the *Tuns*, which lyeth from the West Point of the Haven a great way to the Northwards off from the Shore. *Loughfoil.*

For to find the Channel that lyeth into the Westwards of the *Tuns*, you must look out for a little Sandy Bay which lyeth on the West side even within the North Point of the River under the high Land; bring it so that you may see it open off the foresaid North Point, and Sail in thereupon until you come by the Land, and then run in along by it Southwest, until you come right against *Green-Castle*. *The channel of the* Tuns

For to Sail up from *Green-Castle*, you must run up along by the West Shore by your Lead, and shun the little Sand that lyeth here and there along the side, until you come past which Castle right against the 3 Trees there; there is the ordinary Road, there is your ordinary Road up to *Derry*. *Green-castle.*

From *Lo:l-haven*, unto the Island *Evesterhul*, the Coast is Northwest 4 or 5 Leagues : betwixt the Islands and the Points Men may Sail through, but not without great danger. *Island Enesterhul,*

From the Island *Enesterhul* unto *Loughswilly*, the Coast is Southwest 5 Leagues, that is a fair Haven : for to Sail in there, you must shun the West side, and go in by the East shore; the Land about *Loughswilly* is the highest Land of the whole North Coast of *Ireland*, and thereby it is easie to be known. *Loughswilly.*

Four or 5 Leagues West Southwest, or somewhat Westerly, lyeth a large broad Haven call'd *Sheep-Haven*, it is in some places foul ground, within it Men may lie Land-lockt for all winds; the West Point lyeth out call'd *Horn-head*, or *Cape de Horn*; upon it is a Hill, with two Hommocks like two Horns, and thereafter the Point is named. *Sheep-haven.* *Horn-head.*

Of

Of the Tides and Courſes of theſe Streams.

AT *Dublin* a Southeaſt and Northweſt Moon makes high water. The Flood cometh here from the Southwards, and alſo from the Northwards, about the North part of *Ireland*, and meet one another about *Carlingford*, and there ſtop one the other: the Ebb contrariwiſe falleth to the (Northwards of *Carlingford*) to the Northwards, and to the (Southwards of *Carlingford*) to the Southwards.

On the Coaſt of *Ireland* to the South Rock and North Rock, up to the *Hopland-Iſles*, a South Southeaſt, and North Northweſt Moon maketh full Sea; but to the Southwards of it a Southeaſt Moon.

In the Haven of *Loughfoil* an Eaſt and by South, and Weſt and by North Moon; the Flood cometh out of the Weſt, and Northweſt.

At the Iſland *Eneſterhul* and *Sheep-haven*, an Eaſt and Weſt Moon maketh full Sea: the Flood cometh out of the Weſt.

Of the Latitude of Places.

Fair Foreland lies in 55 *degr.* 35 *min.*

For the Courſes and Diſtances, *See* Pilots Sea-Mirrour, *in* pag. 35.

XII Demonstration,

Of the Northweſt and Weſt Coaſt of Ireland, *from* Horn-head *to* Cork-beg.

WEſt Northweſt about two Leagues from *C. de Horn*, lyeth the Iſland *Tore*: to the Southwards of it lie 3 Iſlands, called *Bailneſs*, Men may Sail through betwixt to the Southwards of *Tore-Iſland*: betwixt it and the Iſland *Bailneß*, from the Iſland *Tore* to the Iſles of *Aran*, the Coaſt is Southweſt 6 and 7 Leagues betwixt both, near *Aran*, lie ſome high Rocks call'd the *Stags* of *Aran*: betwixt *Horn-head* and the Iſles of *Aran* is good Ankor ground all along. *Tore-Iſle.* *Iſlands of Aran.* *Stags of Aran.*

Upon the Northweſt Point of *Ireland* a good ways Landwards in, lyeth a high Hill like a Sugar-loaf, which is ſeen in clear weather before any other Land 9 Leagues off, when that hill lyeth Eaſt and by South from you, then Sail in right with it, you ſhall not miſs to fall right with the great Iſland of *Aran*.

From the Iſland of *Aran* unto the Point of *Tellinghead*, the Coaſt is South Southweſt 8 or 9 Leagues to the Southwards of the *Cape de Tellinghead*, betwixt the Cape and the *Stags* of *Broad-haven*, lyeth a Land, with a great Bay, wherein lie many good Havens, as *Telling*, *Kilbeg*, *Dungal*, *Balliſkanon*, *Sliego*, *Endego*, and *Miy*.

Kilbeg is a fair round Bay, but very narrow at the going in: about half a League to the Weſtward of this Bay, a quarter of a League from the Land, lyeth a little Iſland, which is very low- *Kilbeg.*

and plain at both ends, men may Sail thorough between the Iſland and the main Land if they will; when you come out of the Weſt, and are paſt that Iſland, then go near the Shore which is clean, until you ſhall ſee this Bay open, and then Sail boldly in without fear: you may Ankor where you pleaſe in 5, 6, 7, or 8 Fathom.

St. John's point. A great League to the Southwards of *Kilbeg*, lyeth a great long Point, call'd St. *John's Point*, right Weſt from that Point about a mile, lyeth a great Rock: men may Sail boldly through between the Rock and St. *John's Point*, which is there clear and clean.

Dungal-Haven, About two Leagues to the Eaſtwards of that foreſaid Point, lyeth the Haven of *Dungal* into the Southwards: to Sail in there, you muſt ſhun the Eaſtern Shore, which is very foul, with dry Plates and Rocks, till you come right againſt a little Caſtle which ſtandeth on the North ſide, right againſt it lyeth off a little Riff from the Shore, which you muſt avoid, and when you come about the Point of that Riff, you muſt go over again to the North ſide, for the South ſide is flat and ſhoaldy.

Moy-haven For to Sail into the Haven of *Moy*, you muſt leave the Rocks that lie there on the Weſt ſide, and run towards a little Sandy Iſland, that hath at the North end a little Riff, you muſt go into the Weſtward of it, and leave that Iſland on the Larboard ſide: within that foreſaid Iſland lyeth another little round green Iſland, which muſt be left on the Starboard ſide, ſo ſoon as you are right againſt it, let fall your Ankor, it falleth there at low water always dry.

If you will go from thence to the Town of *Moy*, you muſt light your Ship 8 Foot, to come through betwixt the ſmall Iſlands, and the South Grounds: with an ordinary Tide, there is no more than 9 Foot water.

The Stags of Broad-Haven. The *Stags* of *Broad-haven*, are Rocks that lie to the Northwards, a League or a League and a half a Sea-board of the Point to the Northwards of *Broad-haven*.

Ackeley-head is a very high Point, and ſheweth it ſelf afar off like an Iſland, with a great Saddle, thereby it is good to be known: to the Northwards and Eaſtwards of *Ackeley-head*, lie divers Havens, where it is good riding.

From

From *Ackeley-head* to *Sline-head*, (by Sea-men call'd *Twelve pence*, becauſe the Land doth ſhew it ſelf in 12 round Hommocks,) the Coaſt is South ſomewhat Eaſterly 11 Leagues, betwixt them both lie 3 Iſlands before a great Bay, the Northermoſt or next to *Ackeley-head* is call'd *Cleer*; this hath a high Hill on the North end, which is very ſteep, and at the South end it is flat going down: the middlemoſt is call'd *Boche Rock*, within it is a Road for thoſe that are bound to the Southwards, where men may Ankor in 4 Fathom, betwixt the Southermoſt is call'd the *Horſe*, betwixt *Ackeley-head* and *Twelve Pence*, lyeth within the Land a very high Hill call'd St. *Patricks Hill*, that may be ſeen far off at Sea, and ſhall be ſeen long ordering it ſelf by the Cliff-land, as men Sail along either to the Northwards or the Southwards. *Sline-head, or 12 pence.* *Patricks-Hill.*

From *Sline-head* or *Twelve pence*, unto the Sound of St. *Gregory* before the Bay of *Galloway*, the Coaſt is Southeaſt 9 Leag. where lie three great Iſlands call'd the Iſlands of *Aran*, the Southermoſt is the greateſt, the Channel between the Northermoſt and the middlemoſt, is call'd the Sound of St. *Gregory*, which is on both ſides clean, you may alſo Sail to the Northwards of the Northermoſt Iſland into the great Bay of *Galloway*, and to the Southwards of the Southermoſt, leaving two third parts of the Channel towards the Iſlands, as well in Sailing in, as Sailing out. *Iſlands of Aran.* *St. Gregories Sound*

Somewhat within the Iſland on the South ſide lyeth a high black Point call'd *Black-head*; about two Leagues Northeaſt from the *Black-head*, lyeth an Iſland call'd *Mutton-Iſle*, under it on the Eaſt ſide you muſt Ankor in the Pool in 5 or 6 Fathom: when you Sail from *Black-head*, towards the North Iſland, you muſt take heed of the North ſide, and edge more towards the South ſide. *Black-head* *Mutton-Iſle.*

From the Bay of *Galloway* to *Lupiſhead*, goeth in the Haven of *Limbrick*; four Leagues Eaſt Northeaſt within the foreſaid Point lyeth an Iſland call'd *Seatrick*, you muſt Sail along without it to the Southwards, leave it on the Larboard ſide in Sailing up; about half ways betwixt that Iſland and *Lupiſhead*, lyeth a Shoald, which you muſt ſhun, and run along to the Southwards of it. *Lupiſhead.* *The Haven of Limbrick.*

Seatrick. From the Iſland *Seatrick* unto *Limbrick* are 12 or 13 Leag. Firſt from thence to the Iſland *Quoin* 4 or 5 Leagues, there are two little Iſlands, you muſt Sail cloſe along to the Northwards of them, from thence Eaſt Northeaſt unto a great Rock call'd the Great *Beef*, and then Southeaſt unto another great Rock, call'd the little *Beef*; when you come before the Town in the Haven, you muſt make faſt on the Caſtles with 3 or 4 Cables, for there goeth a very ſtrong Tide as well of Flood as of Ebb: an Eaſt Northeaſt Moon maketh there full Sea.

Iſland Smerrick. From the Haven of *Limbrick*, to the Haven of *Smerrick*, the Coaſt is Southweſt 8 or 9 Leagues: betwixt them both lyeth the Coaſt with a great Bay, wherein lie ſome little Iſlands call'd the *Hogs*.

A little to the Eaſtward of *Smerrick*, lyeth *Sinbrandon-hill*, a very high Hill; they that come out of the Sea from the Weſtwards, ſhall ſee that Hill firſt before any other Land, and thereby eaſily know it: Men may ſee it at Sea in the *Offing* 12, 14, and ſometimes 16 Leagues off, according as the weather is clear.

Four or five Leagues Weſt Southweſt from *Smerrick*, a little off from the Land, lyeth 4 or 5 Iſlands, being high round Hills and Rocks, call'd the *Blaskeys*.

Three great Leagues to the Eaſtwards of *Blaskeys*, lie 3 great Rocks call'd the *Skellocks*, the Eaſtermoſt about a League, and the Weſtermoſt two great Leagues a Sea-board the Land; when you come from the Southwards, and ſee them firſt, they ſhew like Sails of Ships: Betwixt the *Skellocks* and the *Blaskeys* goeth in a great broad Bay deep into the Land, called *Dingle-Bay*, with divers Havens in it.

The *Skellocks* and the *Cape Dauſey* lie Northweſt and Southeaſt 6 Leagues aſunder: betwixt them both goeth in alſo a great broad Sound, Northeaſt in, wherein lie many Iſlands, Havens, and Roads.

About 6 Leagues Eaſt Southeaſt from *Cape Dauſey* lyeth the Point *Mizen-head*: betwixt them both goeth in a great Bay or River deep into the Land, with divers Havens and Roads call'd the *Baſtrey*.

From

From Sline-head, *to* Cork Bay.

From *Mizen-head* unto *Cape Cleer*, the Coaſt is Eaſt and by South, diſtant 7 Leagues.

About 4 Leagues within, or to the Eaſtwards of *Mizen-head* Northweſt from *Cape Cleer* lyeth a Haven, called *Crook-Haven*.

Two little Leagues Weſt and by South of *Cape Cleer*, lyeth a high ſteep Rock along in the Sea call'd *Faſtney*, which ſheweth at firſt ſight like unto a Sail: a little to the Eaſtwards of the Iſland of *Cape Cleer*, lyeth another Iſland call'd Iſle *Shark*; to the Eaſtwards of it betwixt that Iſland and the main Land, goeth in a Haven call'd *Baltamore-haven*; it is ſomewhat narrow at the Mouth of the Haven, but within the mouth of the Haven, it is large and broad, there you may ankor on both ſides where you will; and lie Land-lockt for all winds.

A little to the Eaſtwards of *Baltamore* lie the *Stags*, an *Engliſh* Mile from the Shore; when men come from the Eaſtwards along by the Shore, and ſee them firſt, they are like ſome ſpired Towers together: men may Sail between them and the main Land; there it is large and broad enough.

Northeaſt about two Leagues from the foreſaid *Stags*, lyeth *Caſtle-haven*: without it, on the Eaſt ſide lyeth a little Iſland, you muſt leave it on the Lar board ſide; when you are come in thwart of the little Chappel, you ſhall ſee a Caſtle on the Weſt ſide, over againſt that Caſtle you may Ankor in 12 Fathom.

From *Caſtle-haven* unto the *Old-head*, the Coaſt lyeth moſt Eaſt Northeaſt, and Weſt Southweſt; but *Cape-Cleer* and the *Old-head*, lie Northeaſt and by Eaſt, and Eaſt Northeaſt, diſtant 14 Leagues.

The *Old-head* or *Cape-de Velho*, is a Point that lyeth out far without the other Land, the outermoſt South end of it is very high and ſteep up on the top of it ſtandeth a ruined Caſtle with 3 Towers, whereof the middlemoſt is the higheſt.

About 2 Leagues North and by Eaſt from that Point, lyeth the Haven of *Kinſale*, lying in North Northeaſt; you may Sail in there, keeping the middle of the Channel there is no danger, neither without nor in the the Harbour-mouth: when you come in from the *Old-head* or from the Southwards, and you keep an old ruin'd Caſtle (that ſtandeth within the Haven on the Eaſt ſide).

ſide) even without the innermoſt Eaſt Point of the Haven, then you ſhall not come near that Rock to take any hurt of it: a little paſt that aforeſaid ruin'd Caſtle, ſtandeth a Caſtle on the Weſt ſide upon a Point, there lyeth off a Shoald, which muſt be ſhunned, and therefore you muſt keep cloſe along by the Eaſtern Shore, until you be gotten about the Shoald of the Caſtle, and then Weſtwards up unto the Key of *Kinſale*, there you may Ankor in 8 or 10 Fathom, and lie Land-lockt for all winds; the Town of *Kinſale* lyeth a little to the Northwards in a Bay, where it is Oaſie ſoft ground, part whereof falleth dry at low water.

Four Leagues to the Eaſtwards of *Kinſale*, lyeth the Haven of *Cork*; betwixt both about a League to the Weſtwards of *Cork*, you ſhall ſee, (Sailing along by the Coaſt) two ſteep Hommocks like Towers in the Land not far one from the other; theſe are notable Marks to know the Coaſt; when you are thwart of the Eaſtermoſt you may ſee the Havens-mouth of *Cork*, that lyeth in North Nothweſt; within it is wide and broad, and goeth up into the Land with a broad River; on the Eaſt ſide ſomewhat within, is a Point, where lyeth off a ledge of Rocks, which may be ſhunn'd there, over againſt on the Weſt ſide, ſomewhat far in lyeth another Point, with an old ruined Caſtle, there alſo lyeth off a Shoald to the Northwards of it, men go about to *Cork*, within that Caſtle lyeth a little Tide-haven, and a Sandy Bay, within the Haven lyeth an Iſland, wherein men do Sail round about, and on the South ſide thereof may ride; it is in this Haven of *Cork* at low water 7, 8, or 10 Fathom deep.

Without the Point to the Eaſtwards, is all low Land unto the Point of *Tonghal*.

In all theſe foreſaid Havens an Eaſt Southeaſt, and Weſt Northweſt Moon maketh high water. Without *Cape-Cleer* by the Land, the Flood falleth away Eaſt, and the Ebb Weſt. Betwixt *Cape-Cleer* and *Dorſey*, Men may ſee the Land in 58 and 60 Fathom.

Latitudes.

Cape Cleare lyeth in	5 *degr.* 12'.
Cape De Velho or *Oldhead*	21 *degr.* 28'.

How

How theſe Lands do ſhew themſelves at Sea,

Dongarvan.

When you are before Jochull, *or thereabouts, (two or three leagues from land) ſo that the high mountain of* Cape Quin *be North and by Weſt from you, then ſheweth the land thus, the double inner land is very high blew land, you may ſee it in clear weather twelve or thirteen leagues off.*

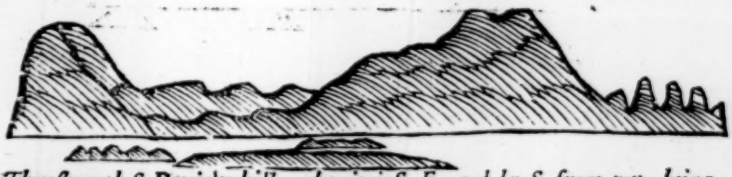
Sound point of *Dublin.* Iſland *Dalke.*

When a man cometh from the Southwards, thus ſheweth the Bay of Dublin,

The point *Houth.* Iſland *Lambey,*

with the point Houth, *and the Iſland* Lambey *to the Northwards of it.*

Don Patrick or Patrickshill.



Thus ſheweth S. Patricks *hill, when it is S. E. and by S. from you, being not far from Land, at the N. ſide of it lye ſome little Iſlands and Rocks.*

Mizan-

Mizenhead. A broad Channel, but within it

is all broken Land. Eaſtnortheaſt C. Clear.

when as Cape Cleare *is* e. n. e. *from you, and* Mizenhead n. e. *and by e: then is the Land unto the* Dorſeys *in theſe forms, as is ſhewed in theſe two Figures here before.*

Thus ſheweth Oldhead *when it is* w. ſ. w. *a half League from you, then may you ſee the Haven of* Kinſale open.

The Land a little to the Eaſtwards of Kinſale *ſheweth thus.*

The land to the eaſtwards of Cork *towards* Jochul, *ſheweth in this form.*

XIII.

XIII Demonstration.

The Coaſt of France *from* Uſhant *to* Bayon.

THe *Fourne* and *Uſhant* lye Weſt South-weſt, and Eaſt North-eaſt, diſtant 2 great Leagues. *Uſhant* ſheweth it ſelf at Sea at the South end low, at the North end going up ſloping; upon the midſt of it ſtandeth a little flat Tower; by which Marks it is eaſie to be known. *Uſhant.*

For to Sail through within *Uſhant*; the Coaſt from the *Fourne* to St. *Matthews* Point, is South South-eaſt 4 Leagues: At the Point of the *Fourne* lyeth two rows of little Rocks, and to Southwards of them, along the Coaſt, lyeth three other heaps of Rocks, each of them about an *Engliſh* Mile one from the other: Run along within two Cables lengths by the aforeſaid Rocks, at the Point which is much nearer the Eaſt ſide, or the Main-land, than *Uſhant*, for to ſhun the Northern *Haghels*, which do lye between *Uſhant* and the foreſaid Rocks; or elſe if you keep St. *Matthews* Abby in the low valley to the Eaſtward of *Conquets-oort*, and ſail ſo right with it, that you run through neareſt the Eaſt ſide, and in the midſt of the Channel between the foul Grounds and the Rocks, until you come thwart of *Blank-bay*, or near *Conquets-oort*, there ſtandeth a Mill on the high land alone, when it is Eaſt from you then the Souther *Haghels* lye Weſt and by North from you, and the Norther *Haghels* North-weſt and by Weſt: When *Halman* or *Haymin Hill*, a high Rock lying on the Eaſt end of *Uſhant*, cometh over the North-weſt end of the Northermoſt *Mullins*, then are you *Haghels.* *Blank-bay* *Halman Hill.*

alſo off thwart of the *Haghels*. He that muſt turn to windwards from the *Fourne* toward *Conquet* or St. *Matthews* Point, let him make uſe of theſe Marks: In the Point of *Conquet*-Haven, or *Conquets-Oort*, are two Valleys, the one is great that is the Weſtermoſt, and one little that is the Eaſtermoſt, in manner as is here portrayed.

Conquets-Oort.

S. Matthews Cloyſter. Conquetts oort.

When you run over to the Eaſtwards, towards the Land, and that the Abby of St. *Matthews* comes at Capſtains Bars length to the Eaſtwards of the ſmalleſt Valley, according as is ſhewed in this Figure, then it is time to caſt about; and when you run over to the Weſtwards, towards *Uſhant*, that the foreſaid Abby of St. *Matthews* cometh a little without the Point of *Conquet* Haven, you muſt alſo caſt about; for when the foreſaid Abby cometh two ſhips lengths without the foreſaid Point, then are you cloſe by the *Haghels*. The Norther and the Souther *Haghels* lye about a ſhot of a caſt Piece diſtant one from the other. Two or three Cables lengths thwart of the Point of *Conquet* Haven, or *Conquet-Oort*, lyeth a ſunken Rock, which with a ſpring-tide cometh above water, called the *Vintner*, by the *French*, *Le bell*. If you ſail into *Conquet* Haven, then run about the Point within a Cables length, as is aforeſaid, until you ſee the Haven open, then you come againſt the *Feniſteires*, which are Rocks that lye off about a Cables length from the Eaſt Land of *Conquet* Haven under water; for to avoid them, run along by the Norther ſhore until you come within the Haven, betwixt the *Feniſteires* and the *Blanck Moins*, that are Rocks by St. *Matthews*: It is a good Road under the Abby of St. *Matthews*, as well for them that are laid to the Northwards, as to the Southwards: If you will go in this Road, coming from *Conquets-Oort*, then run right with the *Blanck Moines* until the Abby of St. *Matthews* be Eaſt South-eaſt from you, ſail then towards it until you come before the Abby.

Norther and Souther Haghels.

The Vintner. Conquet Haven.

Feniſteires. Blanck Moins.

About

About a League to the Eaſtwards of St. *Matthews* Point, towards *Breſt*, lyeth a ſunken Rock, about half a ſhot of a Caſt Piece from the North ſhore: If you will ſail in *Breſt* water, then go from St. *Matthews* Point away Eaſt and by South, and Eaſt South-eaſt, and keep the North end to the Southermoſt *Mullines* without St. *Matthews* Point, ſo along until that the Mill on the North land come to the Northwards of the Trees, then you ſail along to the Southwards of the foreſaid Rocks, and ſo doing you can take no hurt of it; for to ſail forth alongſt to *Breſt*, being paſt the foreſaid Rocks, you muſt run forth within two Cables lengths along by the North ſhore. A little within the Eaſt Point of *Cordon* lyeth a Rane of Rocks about the midſt of the Chanel in the Mouth of *Breſt* water, which at low water lie above water, and at high water are under water, called the *Bagine*, you may run along by both ſides of it, but on the Norther ſide of it is beſt; when the *Breſt* cometh without the Point, ſail then ſo right to it, you muſt ankor to Seaward in eight or nine Fathom, and with the Cable aſhore faſt on a Tree: When you come within the *Bagine*, you may edge up toward the Eaſtwards, or to the Southwards, before the River of *Laderneau* or *Lefou*, and Ankor under the South land in ten, eleven, twelve or thirteen Fathom, before the little Town old *Croydan-Breſt* water, or the River of *Laderneau*; he that is bound in there, may take a Pilot to bring him in where he deſires to be; it floweth there with an ordinary Tide, three Fathom up and down; a South-weſt and Weſt, and North-eaſt and by Eaſt Moon maketh there full Sea. If you come to Ankor within *Breſt*, you muſt pay for Ankoring ten *Sous*, and for it you ſhall get a Ticket of Freedom; if it ſhould happen that you ſhould loſe your Ship upon *Bretaigne* you might therewith challenge your Goods, or elſe they are unfree.

Bagine

Lefou

Bur-Bartrams Bay lyeth two Leagues to the Eaſtward of St. *Matthews* Point, a little League paſt the aforeſaid ſunken Rock; there is good Ankoring for a North, and North-eaſt wind in ten and eleven Fathom. Over againſt *Bartrams Bay* lyeth *Croidan*, from St. *Matthews* Point South-eaſt, diſtant about three Leagues, a great Bay. The *Mullines* are the Rocks which lie to the South-

Bur-Bartrams Bay.

Croidan.

wards of *Uſhant*, and the Weſtwards from St. *Matthews* Point; betwixt them and *Uſhant* lieth a Channel North-eaſt and South-weſt, through there remaineth, at low water, ſix or ſeven Fathom water; he that cometh from the Northwards, and cannot ſaile a weather of *Uſhant*, and the *Mullines*, by reaſon of the flood, may run through here; or he that cometh out of the Sea, and with Northerly winds cannot ſaile a weather of *Uſhant*, may with a flood run through here, and ſo farther his Voyage; when men run through here, either in or out, and keep the midſt of the Channel between both lands, can take no hurt.

From St. *Matthews* Point to the Race of *Fontena*, or the *Keyſer* and *Lavender*, the Coaſt is, South and by Eaſt, ſix leagues betwixt them both ly divers Rocks, whereof men muſt take good heed, as the Hen with the Chickens, the Collier, the Faulkners, Scheminckelborrows; the Hen with the Chickens, [the Collier] and the middlemoſt Faulkner lye from St. *Matthews* Point South-eaſt and by Eaſt, diſtant a league and a half, the Collier lieth from St. *Matthews* Point Eaſt-ſouth-eaſt alſo a league and a half, the Scheminckelborrows lie to the Southwards of the Faulkners, men may run through betwixt them in ten fathom to the Point of *Croydan*, there is good Road and Anchor ground.

Race of Fonteney. The Channel of the Race of *Fonteney* lieth through betwixt the *Keyſer* and *Lavender* South ſouth-weſt and North-north-eaſt, he that will ſaile through here muſt be very careful to caſt his tides well; for it runneth moſt thwart over this Race, ſo that with a South-weſt wind and an out fall, or ebbe, and alſo with calmes, it is very dangerous to come into this Race.

Seames. A little to the Southwards of the *Keyſer* lieth the Eaſt end of the *Seames*, and lie from thence, at leaſt, three or four leagues Weſt-north-weſt into the Sea. A great league North-weſt from the Weſt Point of the *Seams* lieth a Souncken Rock whereof men muſt take good heed. Weſt-ſouth-weſt about two leagues from the *Seams* lieth a row of Rocks like a Bank, whereupon it is not deeper than ſeven fathom, but betwixt the Rocks and the *Seams* it is fifty fathom deep.

Broad Sound. Betwixt the *Seams* and *Uſhant* the *Broad Sound* lies in Eaſt-ſouth-

ſouth-eaſt to St. *Matthews* Point, and from St *Matthew* Point Weſt-ſouth-weſt five leagues into Sea to the Eaſtwards of *Fonteney*, or the *Lavender*, lieth the *Friezebay*, there men may anchor for a South-eaſt and Eaſt wind, and good Anchor ground: to the Eaſtward of the *Friezebay* lieth *Bola-davids bay*, a broad deep Sound, lying into the Land Eaſt-north-eaſt; at the Eaſt ſide of that Haven lie two little Iſlands, or Rocks, where men may anchor round about them, and lie ſheltered for all winds. *Friezebay.* *Bola-davids Bay.*

From the Race of *Fonteney* to the *Pens*, the Courſe is South-eaſt ſomewhat Eaſterly about ten or eleven leagues, betwixt them both lyeth *Old Yarn*, a good Haven, about ſeven leagues Eaſt-ſouth-eaſt from *Fonteney*: From *Old Yarne* to the *Pens* it is South-eaſt and by South; the Weſt end of the *Seams* and the *Pens* lieth South-eaſt and by Eaſt, North-weſt and by Weſt, diſtant about thirteen leagues: from *Old Yarn* to the *Pens* lieth the Coaſt South-eaſt and by South five Leagues. *Old Yarn.*

The *Pens* are very eaſie to be known for him that hath ſeen them once: Upon the South-eaſt end ſtandeth a thick flat Tower, a little to the Weſtwards of it ſtandeth a ſharp Tower, and ſomewhat more to the Eaſtwards againſt the high Land ſtandeth a Village, appearing like a Caſtle, upon the Eaſt ſide thereof ſtandeth a flat Tower, and there cloſe to the Land lie two great Rocks. The *Pens* lie off from the Main land South-eaſt two leagues into the Sea: for to ſaile in there you muſt come in there from the Eaſtwards, and run alongſt by the Strand of the Main land, leaving all the Rocks on the Larboord ſide, until that you come to a great Rock which you muſt leave on the Starboord, and run about to the Southwards of it; being paſt it, edge within it up towards the North-weſt, and you may anchor there a little within, in three fathom at low water; lying there you can ſee no Sea, but at high water the Sea cometh very much tumbling in through the Rocks: You may go away from thence at high water South-eaſt through the Rocks into Sea, but you muſt take very good heed, becauſe it is there full of Rocks, whereof ſome are above water, ſome under water. *The Pens.*

From the *Pens* to the *Glannons*, or *Glenant*; the Coaſt is Eaſt-ſouth eaſt, with that Courſe you ſhall run alongſt to the South- *Glannons.*

Southwards of them. Within the *Glannons* lyeth a Haven called *Bindeth*, at the Eaſt point of that Haven it is full of Rocks. For to
Bindeth. ſaile in there you muſt take heed unto theſe marks, there ſtand two mils far within the Land, bring the Eaſtermoſt of the two over a little Caſtle, that ſtandeth upon a Point within the Haven, keeping them ſo North and North eaſt and by Eaſt, and ſo run in without danger. A League South-weſt from *Glenant* by the Eaſtern Pen marks lieth a great Rock under water, but it is good to be eſpied, in regard the Sea always breaketh upon it, as well within as without this Rock it is forty fathom deep.

When you come off from the *Pens* with an Eaſt and South-
Muttons Iſlands. eaſt Courſe, you ſhall run alongſt far enough to the Southwards of it, about two leagues to the Eaſtwards of *Glenant* ly the Iſlands of *Muttons*, you may ſaile through betwixt them and the Main Land; unto *Groy* or *Blavett* alſo you may anchor within them in ten or twelve fathom betwixt the Land and the foreſaid Iſland, which are clean upon the North ſide form *Mutton* to the
Groy. Iſland *Groy*; the Coaſt is Eaſt and by South, upon the outer ſide of *Groy* ſtand three or four Mills, the Eaſt end of it goeth ſteep down, and the Weſt end ſloaping and flat down, thereby it is good to be known: under *Groy* is good anchoring for a South-weſt wind in ſix and ſeven fathom, at the Southweſt end runneth off a foul ledge, whereof men muſt take good heed.

Blavett. Within the Iſland *Groy* lieth the Haven of *Blavett*, which lieth in about North-weſt in four or five fathom. Upon the Weſt ſide of this Haven ſtandeth a high ſharp Tower called *Quirperly*, from the Eaſt point lieth off a great Ledge of Rocks called the *Bears*, within it on the Eaſt ſide of the Entry of the Haven lie two Sounken Rocks, alſo on the Weſt ſide a rock with a hole, which at half ebbe is uncovered, whereof men muſt take very good heed: in their coming in men run in alongſt by the Weſt land for to ſhun the foreſaid Sounken Rocks and foul grounds.

From the *Pens* unto *Bell Iſle* the Courſe is Eaſt-ſouth-eaſt
Road to know Bell Iſle. twenty leagues, but from *Groy* to *Bell Iſle*, it is South-ſouth-eaſt five leagues. *Bell Iſle* hath at the North-weſt end a ſteep point lying out with a great ſaddle, thereabouts ſtand alſo ſome little houſes, and the end goeth very ſteep down, when as *Bell Iſle* lieth

lyeth North North-eaſt from you; the Weſt End ſheweth it ſelf in three parts, the Weſtermoſt whereof is a great Rock, which floweth at a very high water almoſt under, at the Eaſt End there divideth it ſelf off alſo a great Rock, where, with theſe Marks above preſcribed, it is indifferent well to be known. Men may ſee *Bell Iſle* out of the Sea in fifty five Fathom; on the South ſide lie off many Rocks, and little Iſlands; if you will ſeek a Road under *Bell Iſle*, then you muſt give the North-weſt end a good birth; off from it lyeth a ſunken Rock under water, a good ways from the Land; being come within it, ſail then within two Cables lengths alongſt by the Land; within a Bay ſhot, about by the North Point, before you come before the Village with a little ſharp Tower, called the *Pauls*, there ſtandeth a Caſtle on the Point to the Weſtwards of the foreſaid little Tower; Ankor within that Point in nine or ten Fathom, there you ſhall lie Land lockt for a South South-weſt and North-weſt Wind; if it blow more Northerly, you muſt ſhift and run before the Eaſt End (which is about half a League broad) and Ankor there in ten or eleven Fathom: This Iſland lyeth about South-eaſt and North-weſt; according as the wind bloweth Men do ſhift from one Road to another, it is there every where good Riding; Souther within the Iſland *Bell*, to wit, betwixt the Main Land and *Bell Iſle*, lie many little Iſlands, where at divers places Men may ſail through to the Rivers of *Vannes*, or *Morbeam*, *Roche Barnard*, and the River of *Nants*, called the *Loire*: Of theſe Iſlands are three, the principal Eaſtermoſt is called the *Cardinal*, the Eaſt Point whereof, and the Eaſt Point of *Bell Iſle*, lie one from the other direct Eaſt and by North, and Weſt and by South, about four Leagues; the middlemoſt is called by ſome alſo the *Cardinal*; Men may run all alongſt by the *Cardinals*, either by night or day, in eight, nine, and ten Fathom, all clean ſandy ground; the Eaſt Point of the *Cardinal* and the Entering of the Haven of *Morbeam*, lie North North-weſt, and South South-eaſt, one from the other; from the Eaſt Point of the *Cardinal* to the River of *Roche Barnard*, the Coaſt is right North eaſt. Betwixt the River of *Roche Barnard* and *Nants*, lyeth *Old Downs*, *Croſnick*,

Road under *Bell Iſle*.

Cardinal.

Old Downs

Old downs. *Croſwick* and *Poelgem*, the Land of *Old Downs* lyeth to the Northwards of the Flat Church upon the high land *Poelgem*, is a Village to the Eaſtwards of *Croſwick*, with a high ſharp Tower; if you would ſaile from *Bell Iſle* to the River of *Nants*, then go away from the Eaſt end of the *Cardinal*, or from the Eaſtermoſt Rocks that lie off from the *Cardinal*, directly Eaſt-north-eaſt towards the Weſt point of *Croſwick*, for to ſaile a weather of the *Four*, which is a great bank which at ſome places falleth dry at low water, ſo along until it begin to ſhoul, and that at the ſharp tower of *Poelgem* cometh againſt the higheſt of the Eaſt point of *Croſwick*, then you run alongſt to the Northwards of the foreſaid Bank, go then Eaſt-ſouth-eaſt, or according as the wind is, Eaſt and by South, and Eaſt-ſouth-eaſt, unto the Rock with the Hole called *Pierre Pierce*, but ſo that you come not very neer (at low water) the Land ſomewhat to the Weſtwards of *Poelgem*; for it is not clean alongſt by it, betwixt the *Four* and the point of *Croſwick* it is in the fair way eight, nine and ten fathom deep, when you come neer the Rock with the Hole, then run along to the Northwards of it, and run in very cloſe by it, leaving it on the Starboord ſide of you, for to avoid the foul grounds which lie off from the point of *Poelgem*, towards this Rock, cloſe along by this Rock it is four fathom deep; being paſt this Rock with the Hole, then run all along by the North ſhore unto St. *Nazare*, in three or four fathom at low water; but you muſt take heed of a Rockie Point ſomewhat to the Weſtward of St *Nazare*.

For to ſaile into the river of Nants.

Pierre Perce.

St Nazare

Pelerin. At *Pelerin* is the Landing place ten leagues from *Nants*, where goods are brought off with Liters to the Ships; but from St. *Nazare* to *Nants*, or *Pelerine*, it is Pilots water. For to ſaile from *Bell Iſle* to the Bay of *Armentiers* you muſt go Eaſt-ſouth-eaſt untill you ſee the Abby of *Armentiers* to the Eaſtwards of the Trees, which ſtand within the Land over the ſame Abby; then go on Eaſt and by North, ſo along until that the Abby come within the Caſtle of *Armentiers*, then are you within the *Monks Leg*, then go on Eaſt-ſouth-eaſt until that you be within the Rock of *Pierremen*; you may go about it on both ſides, and when you can ſee the *Grave* open, then you may anchor in

Armantiers

Pierremen.

in seven or eight fathom, and go ashore to fetch a Pilot. From *Armentiers* to *Use*, or *Heys*, it is South and by East seven leagues, and from *Bell Isle* to *Heys* South-east sixteen leagues.

The Island of *Pickeliers* lieth right before the point of *Armentiers*; upon *Use* or *Heys* standeth a sharp Tower, and some little houses, and Mills, whereby it is very easie to be known. From *Use* to the *Killiats*, or the Isle of St *Martins*, the Coast is East-South-east twelve or thirteen leagues; betwixt both lyeth the Bars of *Olone*, about half a league off from the Land of *Poixton*, East and by South seven leagues from *Use*, in the right fair way; and in regard there is nothing but Rocks and Stones, it is not good to come neer them in dark weather. *Pickeliers.* *Heys or Use.*

From *Olone* to the *Killiats* the Coast lyeth most East-south-east five or six leagues; for to saile into the *Killiates*, which is alongst by the Northwards of the Island of St *Martins*, you must go in somewhat Northerly, leave two third parts of the Channel towards St *Martins* Island, and another third part towards the Main Land; along by the Island of St *Martin*, it is uneven and somewhat full of Banks; go in along, as before is said, until that the Church of St *Martin* be South-south-west from you, then you shall be past the Bank, which lyeth North of St *Martins*, and lyeth off from the shore somewhat Westward of St *Martins*; before St *Martins* you may anchor four, five, or six fathom. *For to saile into the Killiats.* *Marks of the Bank before St. Martins.*

The marks for to keep the deepest water when you run over the Bank are these: Keep the great Tower of *Rochell* a hands spike length to the Southwards of the Wood, or Trees which stand upon the Northermost high Land, and run so over the Bank, it is there all soft ground. If you will anchor before the Abby within the Bank, then run in six or seven fathom, and anchor there: But if you will not anchor under St *Martins*, but will saile towards Burnt Island, then bring that little Tower of *Lulow* over a little House that standeth upon the little Island *Urcke*, and keep it so standing; then you can take no hurt of the *Laverdin*, which is a rane of Rocks, lying from the East side of St *Martins* point about an English mile, and at low water are uncovered; when you come by the East end of St *Martins* *Laverdin.*

Iſland, and are bound to *Roſhel*, or elſe you will Ankor under the *Boſſe*, bring the great Tower of *Roſhel* a ſhips length without the *Boſſe*; ſo you can take no hurt of the *Laverdine*; you may Ankor under the *Boſſe* in five or ſix Fathom ſoft ground.

If you will ſail into the River of *Sherrant*, then run about to the Southwards of Burnt Iſland; you may alſo ſail about to the Northwards of it, and ſail in by the Tower of *Vorne* or *Four*, at low Water the River falleth dry at leaſt four Leagues from the Land; but to ſail from Burnt Iſland to *Burwage* you muſt ſail away South South-eaſt, and keep the little Tower of *Heers* to the Weſtwards of the Wood, ſo along until the Tower of *Vorne* come over a little red tiled Houſe that ſtands on the Eaſt ſide of the River of *Sherrant*; ſail in then South-eaſt, and a little South-eaſt and by Eaſt.

Banniard. *Oleron.* The *Banniard* lyeth along the Land of *Oleron*, and lyeth until within Burnt Iſland, at low water it is uncovered, the Tail of it lyeth far to the Northwards: At the South end of *Oleron*, betwixt *Oleron* and the Land, to the Southwards of it, is yet another Channel, where Men may ſail in and out, called the *Mamne Sound*, deep enough for great ſhips, it lyeth in from out of the Sea Eaſt and by North; being come within, there runneth a River toward *Sales*, where Men do Lade Salt; being paſt that, to the other Point of *Mamne Sound* lyeth a Place whereof Men run to the Northwards: Upon theſe Marks you muſt keep the Mills ſtanding upon the Land of *Oleron* over the Trees, ſo you ſhall run to the Northwards of the Place: There is the Road for them that Lade Salt for *Oleron*.

Mamne Sound.

From the Band or Cragg of *Oleron* to the Tower of *Cordan*, or the Pole Head, or the Mouth of the River of *Burdeaux*, the Land lyeth South South-eaſt, and South and by Eaſt, thirteen Leagues. To the Northwards of the Mouth of the River of *Burdeaux*, lie five or ſix high white ſand Hills; but to the Southwards of it, it is ſomewhat low Land, black little ſand Hills being overgrown with ſpiry graſs. From the Tower of *Cordan* off to the Northwards, towards the high ſand Hills, lyeth a ſand Bank called the *Piper*. From the North Point of the River, runneth off to the Southwards a Sand called the *Nor-*

ther

ther Aſſes, and to the Southwards of it lyeth another Sand called the *Souther Aſſes*, through betwixt them both, and alſo along to the Southwards of them, Men ſail into the River. In this aforeſaid Channel, through betwixt the *Aſſes*, remaineth at low water three fathom water upon the ſhoalds. *Norther & Souther Aſſes.*

For to ſail into the River along to the Southwards of the *Aſſes*, coming from the Northwards (that is the beſt Channel) bring the Tower of *Soulack* Eaſt from you, or ſomewhat more Northerly, and ſail in ſo right with it until the Tower of *Cordan* be North and by Eaſt, and North North-eaſt from you; *Royan* ſhall then ſtand North-eaſt from you; or elſe, if you will come from the Southwards, then bring the Tower of *Cordan* North and by Eaſt, and North North-eaſt from you, and ſail in ſo right with it until *Soulack* comes to be Eaſt from you, *Royan* ſhall then ſtand North eaſt from you; ſail then right towards it, and coming near it ſail to the Point of *Meſſie*: when you are now within the Rivers Mouth, and come right againſt the Point of *Meſſie*, that is the Point where the Mills ſtand upon, then edge over towards the broken Caſtle called *Chaſtillion* South-eaſt and by South, that is eight Leagues from *Meſſie*, and then forth in along by the South Land, South-eaſt in unto *Pouliack*, which is two great Leagues. *Chaſtillion*

When you are before *Pouliack* and will ſail to *Bloye*, let the water firſt flow an hour, and then you may well go over with a ſhip that draws nine or ten foot water. The Marks for to ſail in the deepeſt water of this Reach are theſe; there ſtandeth a Mill half way betwixt *Bloye* and *Rocktaw*, keep that without the new Wall of *Bloye*, then you ſhall run in the deepeſt of the Channel; it is in the fair way almoſt all along five fathom deep. *Pouliack.*

Before *Bloye* it is three or four fathom deep, run then along by the North Land in three, four, or five fathom; when you come before the River which lyeth up to the Eaſtwards, called *Dordoign*, then ſail firſt right with the midſt of the ſecond Iſland, and leave it on the Star-board ſide, and go indifferent near along by it, until you be over againſt or paſt the Gallows which ſtandeth upon the Eaſt Point of the River, and then *Bloy.*

again along by the North land unto the four little Houſes; from thence you muſt edge over to the high Tower of *Dublot* or Pidgeon-houſe, coming thwart of it, you muſt preſently edge over again to the Eaſt ſide to the height near *Lermond*, in that edging over, you ſhall run through betwixt the Stone Bank and the Lar-board ſide, and a Shoald Sand Plate on the Star-board ſide over a Bank called the *Pace*, which is the ſhoaldieſt of all the River; there remaineth at low water little leſs than a Fathom.

The Pace. Being come over the *Pace* to the Eaſt ſide, go then in along by the Eaſt ſhore, until you be paſt *Lermond*, then ſail again over to the Weſt ſide, right with the houſes of *Charter-houſe*, and then in all along by the Weſt ſhore, until you come before the Town of *Bourdeaux*; in that crooked Reach betwixt *Lermond* and *Charter-houſe*, it is five, ſix, and ſeven Fathom deep, and before the Town four and five Fathom deep.

When Men will ſail out of the River *Bourdeaux*, they muſt ſtay at *Royan* until they have good weather and a fore-ebb to run out with; in the running out keep the high Sand Hill North North-eaſt from you, ſo long until the Tower of *Cordan* be South eaſt and by Eaſt from you, then you may ſail out through the *Aſſes* North-weſt and by Weſt into the Sea.

From *Cordan* or the River of *Bourdeaux* unto *Arcaſon* the Coaſt lyeth South and North Twenty Leagues, it is all low ſandy Land; betwixt them both lyeth a Tide-Haven called *Anchiſes*, Men may go in there well at high-water with great ſhips.

Anchiſes.

Arcaſon. From *Arcaſon* to *Bayon*, the Coaſt lyeth South and North ſixteen or ſeventeen Leagues, the Rivers Mouth of *Bayon* lieth in between two plain Strands, Eaſt South-eaſt, and Eaſt and by South, and ſometimes more Eaſterly or Northerly, by reaſon of the ſhifting and altering of the Sands before the Rivers Mouth. Upon the Sand of the South ſide of the Channel ſtandeth two Maſts, theſe you muſt keep one in the other, or the innermoſt a little to the Northwards of the outermoſt, and run ſo in over the Bar, or ſhoaldieſt place, until you come againſt the South Point, and then in a long by it; upon the aforeſaid

Bayon.

Bar

Bar is at high water and ſpring-tide at leaſt three Fathom, with an ordinary Tide two Fathom and an half, but at low-water no more than three Foot water; this Bar, and this River, is Pilots water.

The Courſes and Diſtances of the Streams.

WIthout *Uſhant* a Weſt South-weſt and Eaſt North-eaſt Moon, and within the Trade a South-weſt and by Weſt Moon maketh a full ſea.

In the broad *Sound* between *Uſhant* and the *Seams* a Weſt South weſt and Eaſt North-eaſt Moon maketh the higheſt waters: The Flood falleth very ſtrong upon *Uſhant*, and to the Southwards of it through the *Mullens*.

In the *Race* of *Fonteney* a South-weſt and by South and North-eaſt and by North Moon maketh full ſea: The Flood falleth very ſtrong through between the *Keyſer*, ſomewhat thwart over towards the *Lavender*, with very great rippling over the *Calf* (that is the Ledge of Rocks which lieth off from the *Lavender*) and from thence forth North, and North and by Weſt, inwards to St. *Matthews* Point.

On theſe Lands, as on all the Coaſt of *Britaigne*, *Poictou*, and *Gaſgoin*, a South-weſt and North-eaſt Moon maketh high-water, but within the Havens about a Point or two later, according as they lie far within the Land.

Of the Depths about theſe Places.

THe *Backovens*, or the Land of the *Fourn*, Men may ſee in fifty Fathom.

Uſhant

Uſhant being about South from you, you may ſee in fifty Fathom.

In the broad *Sound* it is forty five Fathom.

Bell-Iſle Men may ſee from below in fifty five Fathom, but under the top in ſifty Fathom.

Weſt South weſt from *Mues*, about nine Leagues, you ſhall find Forty five and Forty ſix Fathom; the Ground is full of fine ſmall Stones as great as courſe ſand and very ſteep.

St. *Martins* Iſland and the North end of *Oleron* Men may ſee in Twenty eight and Thirty Fathom. When Men get ſight of St. *Martins* Iſland, they ſhall ſee upon it a high Tower, with a high Houſe, and upon the Strand a Mill with four or five high ſand-hills. Upon *Oleron* Men ſhall ſee a high ſpire Tower upon a red Point, where Men ſhall ſee ſome Trees ſtand over it, and to the Southwards of it is at two or three places ragged ſand-hills.

The Land againſt the River of *Bourdeaux* Men may ſee from the Poop in Thirty Fathom, and the Tower of *Cordan* in Twenty ſeven Fathom.

Betwixt *Arcaſon* and St. *John de Luz* Men may ſee the Land in Thirty Fathom, when about *Bayon* they ſhall ſee *Cabritton*, *Bayon*, *Bedert*, and St. *John de Luz*, almoſt all flat Towers.

Of the Latitudes.

Uſhant lyes in	48 *deg.* 30 *min.*
Bell-Iſle	47 *deg.* 05 *min.*
Iſland Uſe	46 *deg.* 44 *min.*
North Point of *Oleron*	46 *deg.* 10 *min.*
Tower of *Cordan*	45 *deg.* 36 *min.*
Arcaſon	44 *deg.* 40 *min.*
Bayon	43 *deg.* 46 *min.*

For the Courſe and Diſtance, ſee the Pilots Sea-Mirrour, pag. 37, 38, 39, 40.

How

How theſe Lands do ſhew themſelves at Sea.

When Uſhant *is S. and by W. from you four leagues, it ſheweth it ſelf in this form.*

Uſhant *being S. and by E. from you 3 leagues, ſheweth it ſelf thus.*

The Sheets, *or* Slaeplakens, *with the* Pens, *ſheweth like theſe two Figures, as you ſail along by them, and that they are about 4 leagues from you.*

How these Lands do shew themselves at Sea.

Ulmant being E N E and by E from you, so far as you may even see it from below, ariseth in this form.

Thus sheweth the West point of Groy, when it is 3 or 4 leagues N E from you.

Thus ariseth Bel-Isle when the N W end is E from you 4 leagues.

When Bel-Isle is N E from you 4 leagues it sheweth thus.

Heys being S E and by S from you that a Man may see it from the Campagne, sheweth out of the Mass thus.

Heys *being* North *eaſt from you, ſheweth thus.*

When Men ſail out or in at Porthus, *St.* Martens Iſland *ſheweth it ſelf in this form.*

When you are before Porthus, *about two or three leagues from land, then doth* Oleron *and* Olderdon *ariſe in this form.*

The Land about the Bight *of St.* John de Luz, *off from* Cabritton *until paſt St.* Sebaſtians *ſheweth thus, as is demonſtrated in the two foregoing Figures.*

XIV Demonstration.

The Coaſt of Holland: *How Men ſhall Sail from* Amſterdam *to* Urck *(about* Enchuyſer-ſand*) and from* Enchuyſen *to the* Cripple *and* Creyl.

FRom the Buoy to the *Cripple*, which lyeth upon the Eaſt end of the *Cripple-ſand*, three fathom, unto the Beacon upon *Cripple-ſand*, the Courſe is North-weſt and by Weſt, and North-weſt. When *Lutkebrook*, a ſmall Spire Steeple, cometh to *Hem* (which is alſo a Spire Steeple) then are you thwart of that Beacon. From the Bea-
the Cripple. con upon the *Cripple* unto the Souther Buoy upon *Wieringer-flat*, the Courſe is Northweſt and by Weſt, or Weſt North-weſt, according as the Wind and Tide ſhall be; it lyeth at high-water with an ordinary Tide in thirteen foot and an half; the Marks thereof are theſe, *Grootebrook* cometh betwixt two Hay ſtacks to the Eaſtwards of the five Watermills which ſtand to the Eaſtwards of *Warvers hooft*, that is a long Mark in the ſ. *Twiſck*, a ſharp Steeple to the Weſtwards of *Medenblick* cometh over *Almerdorp*, there was wont to be a little flat Steeple, but it is fallen down, and therefore now ſo good not to be known, that was a right thwart Mark. Upon *Wieringen* ſtand-

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eth a Cape, bring *Eaſtlander* Steeple upon *Wieringen*, right over the Cape, and ſail ſo right with it, and you ſhall come right with the Buoy. When you are at the Buoy, *Weſtlander* Church cometh then over *Cleverſtee*, and the eight Mills to the Eaſtwards of *Medenblick*, a little without the Town. For to find the deepeſt of the Flat, coming from the *Cripple*, you muſt be careful to look out for the foreſaid Marks. If that *Twiſck* come firſt to *Almerdorp*, before *Cleverſtee* come to *Weſtlander* Church, then you are too near to *Bree-ſand*, or the Grounds on the Starboard ſide, theſe are ſure Marks for to ſail over the Flats, when there lye no Buoys. Alongſt to the Eaſtwards of the Buoy is the deepeſt water. If you will Ankor before the *Wieringer* Flat, then come no nearer the Flat than when *Twiſck* cometh a little to the Northwards of *Opperdoes*, or half ways betwixt *Opperdoes* and *Almerdorp*.

For to ſail from the foreſaid Souther Buoy over the *Gammels* to *Medenblick*, you muſt bring the Weſtermoſt Watermill of the eight (which ſtands to the Eaſtwards of *Medenblick*) a Capſtain Bars length without or to the Eaſtwards of the Bulwark of the Town, and ſail then boldly without fear right in with them, until that you come into the Road where the ſhips commonly lie; or elſe, if you deſire to go into the Haven, then ſail in right to the Norther-head, there is nothing that can hurt you. But if you muſt turn to Windwards over the *Gammels*, and that your ſhip draweth more than eleven foot water, ſo run no further over to the Weſtwards, than that the foreſaid Watermill cometh almoſt within or a handſpikes length to the foreſaid Bulwark, ſo that yet you may well ſee through betwixt them, then caſt about, and run over to the Eaſtwards, ſo long until *Grootebrook* come in the five Watermills, which ſtand to the Eaſtwards of *Warmers-hooſt*, or on the Eaſtward of them, ſo you ſhall not do amiſs, for it is there broad and wide. *Gammels.*

If you deſire to ſail over the *Gammels* to *Medenblick*, when you come from the *Elve*, then bring the Steeple of *Opperdoes* over the Weſtermoſt Watermill of five, which ſtand to the Weſtwards of *Medenblick*, and run in ſo right with them, *Medenblick.*

nntil that the Weſtermoſt Watermill of eight (to the Eaſtwards of *Medenblick*) come to ſtand a Capſtain Bars length without the Bulwark, as here before once already hath been ſaid. Having theſe Marks thus, and that it do become dark, then go on South and South and by Eaſt, according as the Wind and Tide ſhall be, and you ſhall not do amiſs, neither ſhall you miſs the Town; in this foreſaid fair Way, there is no leſs depth than upon the *Wieringer-flat* and all ſoft ground.

Twiſck. When the Steeple of *Twiſck* is over the Weſtermoſt Watermill, except one of five, which ſtand to the Weſtwards of *Medenblick* and *Groote-brook*, in the little Village to the Eaſtwards of the five Watermils, on the Eaſter Dyke, then are you in thirteen foot from the Northweſt point of the *Cripple*. Upon theſe foreſaid Marks, and thirteen foot, lyeth a Buoy with three Leagues, and on the foreſaid Weſt Shore lye three driſt-Beacons in twelve foot, and then cometh the Weſtermoſt Watermil of the eight, which ſtand to the Eaſtwards of *Medenblick*, and you ſhall not have leſs water than upon the *Wieringer-flat*.

From the Souther Buoy to the ſecond or Middle Buoy, the Courſe is North-weſt, and North-weſt and by North; but for to find the deepeſt water, go firſt North-weſt, ſo long until that *Ypels-hoofs* Church come over the Watermil which is called the *Bolmill*, and then forth North-weſt and by North. When the Cornmil upon *Wieringer-flat* cometh in the ſwamp of the *Oever*, then you have the length of the ſecond Buoy, which lyeth upon the Weſt or the South end of a little Plate, called the *Reppel*; the Fair Way is along to the Weſtwards of it, there being at low water two fathom large, and at high water ſcarce three fathom deep. On the Weſt ſide of the Fair Way, betwixt the Souther Buoy and the Middle Buoy, neareſt the Middle Buoy, lyeth a hard Sand called the *Sow*, which is on the Eaſt ſide very ſteep and needle, to which (in ſailing up) Men might ſail within a point or tail of it: To the Weſtwards of it ſhooteth off another Tail to the Northwards, a great ways towards the Northeaſt Buoy. Upon the outermoſt or Northermoſt point, called *Seug-oort*, ſtandeth always

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a Beacon. Upon *Wieringen* upon the *Oever*, ſtandeth two Capes with Barrels on them, the one upon the North end of the *Oever*, and the other upon the head; they are ſo little that you can hardly ſee them, when you come off the Souther Buoy towards the Middle Buoy, then keep them not one in the other, for if you keep them one in the other, then you will be very cloſe by the South Shore, and ſhall but even run clear of the *Sow*; but keep the ſouthermoſt a little to the weſtwards of the northermoſt, and then you ſhall run along the right Fair Way, and ſhall not take any hurt of the *Sow*. When you come near the Middle Buoy, you muſt leave theſe Marks, and uſe them then no longer. *Wieringen.*

The Middle Buoy.

FRom the Middle Buoy unto the Norther Buoy, then cometh *Ooſtlander* Church and the Cornmil, both over a little Chappel covered with red Tiles, that ſtand upon the *Oever*, thwart of it alſo ſtandeth the foreſaid Beacon upon *Seug-oort*. By the Norther Buoy it is ſcarce three fathom deep at high water, the Fair-way is along to the weſtwards of it. When you come by the Norther Buoy, keep ſtill the foreſaid North North-weſt Courſe, until that *Ooſtlander* Church come to the northwards of the Sedge-dyke of the *Oever*, and then you are paſt the little Plate. *Seug-oort.*

When as the *Ooſtlander* Church cometh from the Sedge-dyke, go then North and by Eaſt on to the *Neſſe*. In that Fair-way it is broad and wide, the Weſt Shore all along unto the *Neſſe* is very flat, there you cannot take any hurt, but may boldly run along by it, although it were a Lee-ſhore; but the Eaſt Shore is ſteep, eſpecially ſomewhat further out towards *Jaep-vaer*. When the great Cape from *Wieringen* ſtandeth a great Ships length to the Eaſtwards of the houſes upon the *Oever*, then you are well to way, and right into the Fair-way, betwixt the Norther Buoy and the *Neſſe*. When you then ſhall ſee that *Ypels-hooft* and *Strn* are the one in the other, there is the Road where

where Men do unlade, you may Ankor there about in the midſt of the Fair-way in four fathom, the nearer the Eaſt Shore the deeper. *Jaep vaer* is a Tail of Sand or Plate faſt to the Eaſt Shore, which you might ſail within, when you ſail upwards in ſix or ſeven fathom: Upon it lyeth a black Buoy.

The Neſſe. Upon the Point of the *Neſſe*, over againſt *Jaep vaer*, lyeth a white Buoy: Theſe lye both in three fathom and an half. In the Winter, when the Buoys are taken away, then in place of the white Buoy, there is ſet a Beacon upon the *Neſſe*. From the *Neſſe* to *Vogel-ſand*, the Courſe is moſt North-weſt, therefore when you have got the length of the Buoy or Beacon upon the *Neſſe*, go then more Weſterly, North North-weſt, and North-weſt and by North, and North-weſt, unto the Beacon upon *Vogel-ſand*: The Weſt Shore you may ſound in ſix and ſeven fathom. The Marks of this Reach are theſe: The Mill of *Ooſter-end* (which is a little Village upon the Eaſt End of *Texel*) and the Cape that ſtandeth upon the Dyke, one in the other, then you are amidſt the Channel in the deep that is ten, eleven, and twelve fathom: When the Mill ſtandeth ſomewhat to the Southwards, or to the Weſtwards of the Cape, then are you by the South Shore, which is very ſteep, which (in turning to windwards) you may not come nearer than in eight or nine fathom: But being paſt *Vogel ſand* it groweth ſhoaldier, and the Eaſt Shore very ſteep. As ſoon as you find that it beginneth to ſhoald, you muſt caſt about, elſe you ſhould preſently be on again the Eaſt Shore.

Vogel-ſand. From the Beacon upon *Vogel-ſand*, the Courſe is Weſt North-weſt unto the Buoy upon *Burg-ſand*, which lyeth upon the Tail of the *Share*: The Marks of it are, the *Eyerland* even upon the Eaſt Point of the Iſland *Teſſel*, and the Church of the *Horn* upon *Teſſel* to *Zuydhaffel*, which is a few houſes to the Northwards of the Sconce. Or elſe when you come about *Vogel-ſand*, then keep the foreſaid Cape and Mill one in the other, until that the foreſaid *Horn* come to or through *Zuydhaffel*, and then run on keeping them ſo: When that *Eyerland* cometh even to the Eaſt Point of *Texel*, then you have the length of the Buoy upon the *Burg-ſand*, you may bring the *Horn* well ſomewhat to the

the Northwards of *Zuydhaffel*, but in no wiſe to the Southwards of it, for elſe you ſhould ſail on againſt the South ſhore. For to ſail from thence to *Coop Vaerders* Road, you muſt keep the *Horn* of *Zuydhaffel*, and ſail forth keeping them ſo until you come againſt *Texel* in the Road, and Ankor there where you think good. Before *Ooſter-end* it is beſt for ſmall Ships, there it is ſhoald water, and there goeth little Tide, but moſt Ships do Ankor before the *Geeſt*.

Upon the Point of the *noſe* lyeth a white Buoy in three fathom, on the Weſt Point of the *Balgh*, which you muſt leave on the ſtarboard ſide, and run about to the Eaſtwards of it into the *Balgh*, and then forth along by the beacon to *Wieringen*, you muſt leave all the beacons alſo on the ſtarboard ſide.

For to ſail from the *Coop vaerders* Road out at *Texel*, you muſt go firſt South-weſt, or ſomewhat weſterly, to the *Helder*, or run along by the *Texel* ſide in nine or ten fathom, until you come near the *Helder*, and go out Weſt, cloſe along by the ſhore of the *Helder*, and by little and little ſomewhat more Northerly, until that the Capes upon *Huyſdown* be to one in the other, or that greateſt come through the ſmalleſt, to wit, to the Weſtwards of it, and then go out North North-weſt, or more Northerly, according as the Wind or Tide ſhall be, until you come againſt the North ſhore, in five or ſix fathom, and run boldly out along by it, until that you be clear out at Sea. *Coop vaerders Road.*

When the Tower of Weſt-end (which Men do name the Weſter-end of *Wambus*) cometh to be Eaſt North-eaſt from you, or a little more Eaſterly, you ſhall then have the length of Cape and Steeples buoy, that is the innermoſt buoy of the *Spaniards* Channel, which you ſhall eſpy on the larboard ſide. To the Northwards of it lye three other buoys, all along the the Eaſt ſide of the *Keyſers* Plate, near upon one Courſe, to wit, North North-weſt, or a little more Northerly, which you muſt leave (in ſailing out) all on the larboard ſide. The outermoſt buoy lyeth from the fourth North, or ſomewhat Eaſterly: Upon the Point of the *Keyſers*-plate in two and twenty foot, at low water, you may run along to the Weſtwards of it,

it, but not far, for the *Keyſers*-plate is on the Eaſt ſide unto the outermoſt end very ſteep, but the Eaſt ſhore of the deep it is flat. When you come thwart of the foreſaid outhermoſt buoy, then lyeth the *Kooger* Church right Eaſt North-eaſt from you, and the Capes upon *Huyſdown* are one in the other.

Spaniards Channel. For to find *Spaniards* Channel coming from the Northwards, you muſt bring the Capes upon *Huyſdown* one in the other, or a little through one another, to wit, the *Runner* that is the ſouthermoſt and greateſt, a little to the Eaſtwards of the other, then they ſhall ſtand South South-eaſt from you, ſail then right in with them, keeping them ſo, and you ſhall ſail right upon the outermoſt buoy, or in ſight of it, which lyeth, as is ſaid, upon the Point of the *Keyſers*-plate in two and twenty foot at low water: When you come to the buoy, the *Kooger* Church ſhall lye due Eaſt North-eaſt from you.

Therefore if you come from the Weſtwards or the Southwards, then bring that Church no more Northerly than Eaſt North-eaſt, but rather a little more Eaſterly from you, and ſail then right with it, until that the Capes come one right againſt another, or elſe you ſhould lightly ſail upon the *Keyſers*-plate, which is without upon the North ſide very ſteep.

Men may run along to the Weſtwards of the outermoſt buoy, but not far, along to the Eaſtwards of it, it is broader and wider.

From the firſt, or the outermoſt buoy, to the ſecond, the Courſe is South ſomewhat Weſterly, and from thence to the third, fourth, and fifth, which is the buoy of the Cape and Steeple, it is almoſt one Courſe, South South-eaſt or ſomewhat ſoutherly, the buoys lye all on the Weſt ſhore, Men muſt needs ſail along to the Weſtwards of them, but not far, for the Weſt ſhore is ſo ſteep, that if a great ſhip ſhould lye with the Stem againſt it, there ſhould be a Head no more than three foot, and by the Main-maſt at leaſt three fathom deep, but the Eaſt ſhore is flat, Men may run along by it upon your Lead, until they come within the buoys. The buoy upon the Tail, that is the innermoſt buoy of the *Slenk*, lyeth from the buoy upon

upon the Cape and Steeple, South and by Weſt, and South ſouth-weſt, but the Helder South eaſt. Men may ſail from the buoy upon the Cape and Steeple right with the Helder without danger, or to the buoy upon the tail, and from thence along by the South ſhore, which is alſo very ſteep, or right to the Helder, according as ſhall be beſt convenient for the wind and tide. The foreflood falleth very ſtrong over the ground North-north-eaſt to the Spaniards Channel, until half flood, and the fore-ebb to contrary South-ſouth-eaſt, until half ebb. The Helder lieth from the buoy upon the tail Eaſt ſouth-eaſt and ſ. e. and by e. When you are come neer the Helder, run cloſe along by it, for to avoid a tail, which ſhooteth off from Geeſt-ſand, which you might ſail within, when you come in out of the Sea, there lieth a buoy upon it, which you muſt leave on the larboard ſide, being paſt the Helder, go North-eaſt, or ſomewhat more Eaſterly, or along by the Teſſels ſide in eight or nine fathom, unto the *Coopvaerders* Road, the *Wieringen* ſide is ſteep. *To Helder.*

In the *Slenk* lie ſix buoys, the innermoſt lieth upon the tail of the *Keyſers plate*, Weſt North-weſt from the Helder. For to ſail out at the *Senk*, you muſt run along to the Southwards of it, and leave it on the Starboard ſide, and go out Weſt, and and Weſt and by South to the ſecond and third buoy, from the third to the fourth and fifth Weſt South-weſt; the ſixth or outermoſt lieth a little more Southerly. *The Slenk.*

For to find the *Slenk* coming in out of the ſea, then bring the Cape upon the Iſland *Texel*, and the *Weſten*, that is the ſteeple of *Weſteynder* Church, which men do alſo name the *Wambus*, one in another, then they ſhall ſtand a little more Northerly than Eaſt North-eaſt from you, ſail in ſo right with them, and you ſhall run in ſight of the outermoſt buoy, which lieth from the *Kiickdown* Weſt North-weſt, and Weſt from the Helder. If you come from the Northwards or the Weſtwards, and will go in at the *Slenk*, then bring the *Kiickdown* Eaſt South-eaſt from you, or the great Cape upon *Huyſdown* in a little valley, a little to the Northwards of the *Kiickdown*, to wit, betwixt the *Kiickdown* and *Cane Neles* houſe, ſail then ſo right in with them, until that the Cape upon *Teſſel* and the *Weſten* *Kijckdown.*

are one in the other, then you have length of the outermoſt buoy, and ſhall not miſs to meet with it, which lyeth in four fathom at low water. Keep that Cape and Steeple one in ſo right with them all along until paſt the third buoy, which lye all, like as alſo the fourth and fifth, in the midſt of the Fair-way, but along to the ſouthwards of it is deepeſt, the ſouth ſhore is very ſteep, ſo that having one caſt four fathom and an half, the next caſt you ſhall have but three fathom, but the weſt ſhore is flat going up. The fourth buoy lyeth from the third Eaſt North-eaſt, or ſomewhat more Eaſterly. The fourth and fifth Eaſt and by North. The fifth and ſixth Eaſt and by North, and Eaſt North-eaſt. The ſecond buoy lyeth at low water twenty or one and twenty foot, upon the ſhoaldieſt of the *Slenk*, the other buoys lye in four fathom at low water, but the ſixth or innermoſt in three fathom upon the point of the Tail, which you may not ſail about to the Northwards of it, but muſt leave it on the larboard ſide in ſailing in.

The Land-deep. For to ſail out at the Land deep, then run along within a bow ſhot of the foot Strand in *Huyſdown*, and about by the Heads, and you ſhall not miſs the innermoſt buoy, which lyeth upon the ſhoalds, neareſt the weſt ſhore in ſeventeen foot at high water, and thirteen foot at low water, that ſhoaldy place is not above two ſhips length broad, over it, and alſo within it, it is deep enough. Thwart of that buoy ſhooteth off a little Tail from the ſhore towards the buoy, therefore run cloſe along by the buoy, and leave it on the Starboard ſide of you in ſailing out. Beſides that buoy, there lye three other buoys in the Land-deep, which you muſt leave all lying ſeaward of you, and run through betwixt them and the ſhore, when you are come paſt the fourth buoy, you ſhall be paſt the ſhoalds.

For to find the Land deep from the ſouthwards out of the Sea, you muſt take the ſounding of the ſhore in four fathom, and run ſo along by the ſhore, and you ſhall ſail right by the outermoſt buoy, and come no nearer the ſhore, or elſe you ſhould ſail within the Tail of *Arrian Bergers* Creek, which ſhooteth off to the ſeawards from the ſhore, to the ſouthwards of the ſouth Sand-hill. Or elſe if you come not off the Sea with an

open

open wind, then ſee and keep the great Cape upon *Huyſdown* over *Dirkooms* Sand-hill (a little from ſouth of *Kijckdown*) and ſail ſo in right with it, you ſhall not miſs to meet with the outermoſt buoy, which lieth at low water in four fathom and a half neareſt to the Weſter-grounds, or to the *Haecks*, leave it on the larboord ſide, and run along to the Eaſtwards of it, through betwixt it and the ſhore, it lieth moſt North-eaſt, and North-eaſt and by North in, you cannot lightly take hurt on neither of both ſides: if you dobut take heed to keep you from the ſhore. *Kijckdown.*

Thwart off the *Kiickdown*, or coming to the S.wards of it, you muſt edge a little off from ſomewhat of the ſhore. When you come to the 2d. buoy, then cometh the Mill to the N.wards of the *Kiickdown*, and at the third, the Mill and *Cane Neles* houſe come one in the other; which two buoys lie both in five fathom at low water. From the third to the innermoſt buoy it is North-eaſt and by Eaſt, run cloſe along to the Eaſtward of it, for to avoid the aforeſaid little Tail of Sand, which thwart of it lieth off from the ſhore, and then forth within a Bow ſhot about by the Heads, and ſo along by the Strand of the Helder: For to ſail up from the Helder towards *Wieringer flat*, you muſt go North-eaſt, or ſomewhat more Eaſterly, according as the Wind and Tide ſhall be, or elſe in eight or nine fathom along by the *Texel*, until that the *Hoorn* come to the Northwards of *Zuydhaffel*, but take heed of *Wieringer* ſide, which is ſo ſteep there, that you may have twelve or thirteen fathom at one caſt, and ſhould be a ground before you ſhould be able to heave the Lead again.

When that the *Hoorn* cometh then to the Northwards of *Zuydhaffel*, then keep them ſo ſtanding, and ſail up ſo to *Vogel-ſand*, when that *Eyerland* cometh even without the Eaſt point of *Texel*, then you have the length of the buoy upon *Burg-ſand*, which lyeth on the ſouth ſhore, upon a Tail of Sand, which Men may ſail within a five or ſix fathom. From the buoy upon *Burg-ſand*, it is Eaſt North-eaſt to the Beacon upon *Vogel-ſand*, but ſail upon the foreſaid Marks of the *Hoorn* and *Zuydhaffel*, ſo long, until that you have the Cape upon *Texel*, *Zuid haf-fel.*

and the Mill of *Ooſter-end*, one in the other, then keep them one in the other leaving the firſt Marks, and ſail up ſo unto the buoy or Beacon upon the *Neſſe*, and you ſhall run amidſt the Channel in the Fair-way, which is ten, eleven, and twelve Fathom deep. If you bring the Mill a little to the Weſtwards of the Cape, then you ſhall be cloſe by the ſouth ſhore, which is ſo ſteep, that you may not come near it turning to windwards than in eight or nine fathom. Being come about the *Neſſe*, then go on South and South and by Weſt, towards the buoy upon the flat.

Teſſel is a long plain Iſland, whereupon ſtands four Churches, the Weſtermoſt hath a high ſharp Steeple, and is called *Weſt-end*, or St. *Johns*, but by the Pilots it is called *Weſten* or *Wambus*. To the ſouthwards of that ſtandeth another ſharp Steeple, called the *Hoorn*. The third is called the *Burg*, which ſtandeth ſomewhat more to the Northwards than the other two before-mentioned. The fourth is called the *Koogh*, which is the Northermoſt of them all, without a Steeple, and is covered with blew Slates.

Eyerland. The *Eyerland* lyeth cloſe to the Eaſtwards, or to the Northwards of the *Teſſel*, and faſt to it, , when it floweth ſomewhat high it is divided off from the *Teſſel* by the Sea, and made an Iſland, it ſheweth it ſelf off at Sea like a low plain little Iſland with little Hommocks, there ſtandeth upon it no more than two little Houſes.

Huyſdown is a ſhort Point of Land with ſome white Sand-hills, whereof the greateſt and higheſt is called *Kijkdown*, the next to the ſouthwards of it, is called *Dirkooms* Sand-hill, further to the ſouthwards they run flat off by little, and at length to nothing, in alſo ſome Sand-hills, betwixt the *Helder* and *Kijkdown* it is a moſt flat Strand, with ſome ſand-hills like a Dike, upon which, about half way betwixt both, ſtandeth the little or the outermoſt Cape, the great Cape ſtandeth ſomewhat within the Land, about Eaſt from the *Kijkdown*.

Huyſdown or the *Maſdiep* and the *Maes*, lye South-weſt, ſomewhat ſoutherly, and North North-eaſt ſomewhat Northerly, about twenty four leagues aſunder. From *Huyſdown*

to

to *Petten* the Coaſt lyeth South and by Weſt four leagues. *Petten* hath a little Church with a little Steeple, and thereabout you ſhall ſee two other little ſharp Steeples in the Northland. A little to the Southwards of *Petten* lyeth *Camper-down*, the beſt Land to be known thereabouts, the North end is a high ſteep white Sand-hill, which goeth ſloping down: The ſouthermoſt part is gray and rough, being grown over with head or ſpiry graſs; to the ſouthwards of it lye many rough Hommocks or Sand-hills, where ſometimes you ſhall ſee among them a white ſpot, ſo that it is very good to be known. From *Petten* to *Egmond* upon the Sea it is three leagues. *Egmond* upon the Sea is alſo very good to be known, for it hath a thick flat Steeple which ſtandeth like a ſail in the ſand-hill, and a little to the ſouthwards of it you may ſee *Egmond* within, which hath two high Steeples upon the Abbey cloſe one to the other, whereof the one is ſharp, and the other, to wit, the northermoſt, is flat, becauſe the Spire is lately faln down. A little to the northwards of the Abbey ſtandeth another Steeple of the Church upon the old Walls, but it is not ſo high as that upon the Abbey: So that upon all the Coaſt of *Holland* there is no place ſo good to be known as this. When you are thwart of *Wijck* upon the Sea, you may ſee *Beverwijck* a little to the Northwards of it which is a high thick and ſharp Steeple: Beſides that you may ſee alſo betwixt *Egmond* and *Wijck*, upon the Sea, *Caſtricum*, and more other ſharp Steeples. From *Wijck* upon the Sea to *Sandfoort*, it is three Leagues. *Sandfoort* hath a ſharp Steeple, with a high Fire-beacon, a little to the Southwards of it, in the black ſand hill which ſheweth it ſelf alſo like a Steeple.

To the Northwards of *Sandfoort* lieth a high white ſand-hill, along over which you may ſee *Haerlem*, a high Spire Croſs Church, which hath a high ſharp Steeple upon the midſt of the Church, and alſo to the northwards of it a high ſmall Steeple called *Baeckeneſſer* Steeple, thwart of it hath the Coaſt of *Holland* a great Bay. From *Sandfoort* to *Northwijck*, upon the Sea, it is three leagues; that is a flat Steeple, whereby ſtandeth a Fire-beacon. To the northwards of *Northwijck* upon the Sea you may ſee *Northwijck* within, a flat Steeple, whereupon ſtandeth *Sandfoort.*

ſtandeth a little Cap not high, and upon the midſt of the Church ſtandeth a little ſmall Tower. From *Northwijck* to *Catwijck* upon the Sea, it is a great league, to the Southwards of it ſtandeth a high Fire-beacon, to ſee to like a Steeple: You may alſo ſee thereabout within the Land, when you are not very far from the ſhore, *Catwijck* upon the *Rhijne*, and and *Rhijnsburgh*, and *Valkeburgh*, all ſharp Steeples. From *Catwijck* to *Schevelingen* are three leagues, the Quire of *Scheveling* Church is ſomewhat higher than the Church of it ſelf, in manner of *Hagues* Church, a little to the ſouthwards of the Church ſtandeth alſo a Fire-beacon. About an half League within the Land, you may ſee the Church of the *Hague*, which is very good to be known, the Quire is higher than the Body of the Church. The Land from *Scheveling* to the *Heyde*, it is two Leagues, and from thenceforth to *Graveſand*, or to the North ſide of the *Maſe*, one League. The *Heyde* is a Village without a Steeple, but a little within the ſand-hill ſtandeth a flat Steeple called *Monſter*. *Graveſand* is a high ſharp Steeple, very good to be known, which ſtandeth on the North ſide of the *Maſe*. The *Brill* is a great flat Steeple on the South ſide of the *Maſe*. All this Coaſt of *Holland*, from *Huyſdown* to the *Maſe*, is altogether clean, which Men may come ſo near to as they will, into four and five fathom.

Grave-ſand.

Of the Maſe *and* Goerees-gate.

THe *Maſe* hath two Channels or Deeps, the Norther Channel goeth in by the North ſhore, and the Souther by the South ſhore, or by the Land of the *Brill*. Betwixt theſe two Deeps lyeth a great Plate of Sand, called the *Honde-plate*, there remaineth at low water about ſix and ſeven foot, and at ſome places eight foot water.

Upon the North ſhore of the *Maſe*, about South-weſt from *Graveſand*, are two Capes. Will you ſail in the other Channel, bring the innermoſt of the two, that is the greateſt Cap, a half handſpikes length to the ſouthwards of the outermoſt, and

then they ſhall be a little more ſoutherly, than eaſt from you; keep them ſo ſtanding, and ſail ſo right in, and you ſhall not miſs to fall right with the outermoſt buoy, which lyeth at low water in twenty foot. Or elſe, if you come from the northwards along by the Strand, and keep the ſounding of the ſhore in twenty foot by low water, or ſomewhat more, according as it ſhall be flowed, you fall alſo right with the outermoſt buoy: Or, if you keep nearer to the ſhore in eleven or twelve foot, then you ſhall fall with the ſecond buoy. From the outermoſt buoy to the ſecond, ſail yet right in with the Capes, which lyeth in ten or eleven foot upon the ſhoaldieſt of the Channel, right thwart of the outermoſt Point of the Land on the North ſide, but nearer the *Hond-plate*, as the Point which lyeth off from the North Point, ſo that you muſt go about to the ſouthwards of it, but along to the northwards it is broadeſt, but in all not wide. From the North Point runneth off a little tail, whereof you muſt take good heed, it is very ſteep, upon it the Sea breakes and ripples very much. With weſterly Winds the Sea is all in a breach, all over that northern Channel, thwart of this foreſaid ſecond buoy, ſo that to ſee, it appeareth as if it were not a Channel; but fear not to run cloſe along to the northwards of the foreſaid ſecond buoy, thwart of it you have no leſs by half flood than thirteen foot, or thereabouts. From the ſecond buoy to the third, the Courſe is more northerly, you may ſee perfectly enough from one to the other. As you come to the third buoy, the innermoſt Cape is a little to the northwards of the outermoſt. The third buoy lyeth at the North end of the *Raſſes*, alſo eleven foot as the ſecond, which you muſt alſo go about to the northward of. Betwixt the ſecond and the third in the Fair-way is alſo one depth. The North ſhore is ſteep about the ſecond buoy, but towards the the third buoy it is ſomewhat flatter, upon it ſelf you can take heed.

Hondt-plate.

The fourth buoy lyeth from the third South South-eaſt upon the South end of *Raſſes*. The *Raſſes* is a great Sand-rib on the Eaſt ſide of the *Hondt-plate*, which is very ſteep, and with low Ebbs cometh above water at ſome places.

The Raſſes.

Betwixt

Betwixt the third and fourth buoy, you find it deep in the right Fair-way, fourteen, fifteen, and ſixteen foot, which the Fiſhermen do call the *Panne*, on the North-eaſt ſide it is there riſing ground, which in turning to windward, you may borrow of it by your Lead, ſo ſhoald you as you will and pleaſe to have (according as your occaſion) it ſelf.

When the Steeples of *Monſter* and *Graveſand* come one in the other, then you are paſt the *Raſſes*. The fifth buoy lyeth in eleven or twelve foot water upon the Eaſt Point of the new Rib, and lyeth from the fourth buoy South-eaſt and by South; all which buoys you muſt leave on the ſtarboard ſide in ſailing in. To the Eaſtwards of it the ſouther and norther Channels come together in one. From the fifth buoy to the ſixth, which is the buoy againſt the *Polder*, it is moſt one Courſe as before, but may eaſily ſee from one to the other, that you muſt leave alſo on the ſtarboard ſide, thwart of it in the Fair-way, it is ſixteen and ſeventeen foot deep. Coming to the Eaſtwards of that buoy againſt the *Polder*, you ſhall ſee a Houſe upon the Dyke betwixt *Swartewal*, and the Head of the *Brill*, called, Houſe of *Lucht*, bring that over *Ambroeck*, which is ſomewhat a flat Steeple, a little to the ſouthwards of *Swartewal*, and ſail ſo right in with them, until you come before the *Brill*; if you deſire to anchor there, and you ſhall ſo leave two buoys more on the larboard ſide. The firſt is the Eaſtermoſt buoy againſt the *Polder*, the ſecond the buoy upon the *Crab*, which is a great broad tail which lieth off from the Iſland *Roſenburg* until paſt the *Brill*. But if you will not anchor before the *Brill*, but will ſail further up, then run up right with the foreſaid Marks of *Ambroeck* and the Houſe of *Lucht*, until you come near the ſhore, and along by it, until you come to *Heenvliet*. From the Eaſt end of *Roſenburg* runneth off a Tail, which you might ſail within when you ſail upwards. If you bring not the Tower of the *Brill*, when you are paſt the Heads of *Swartewal*, without, or to the northwards of theſe Heads, but keep it to the Southwards of them, then you cannot ſail within it, but ſhall ſail far enough along to the ſouthwards of it. A little to the Eaſtwards of *Heenvliet* goeth in old *Maes*, the flood

The Brill.

The old Maes.

flood falleth in there very ſtrong, whereof you muſt be careful, that you be not carried upon the *Wheatſand*, that is a great Plate of Sand lying in the midſt of the Mouth of the old *Maes*, which falleth a great ways dry at low water, and lieth out with a long ſmall point to the weſtwards into the *Maes*. For to avoid it, you muſt look out for a Wood of Trees, ſtanding on the ſouth ſhore, a little to the Eaſtwards of the old *Maes*, keep the Steeple of *Rotterdam* to the northwards of that Wood, and then you ſhall go clear of that *Wheatſand*; but if you let that Steeple come to the ſouthward of that foreſaid Wood, you ſhall certainly come to touch upon the foreſaid Tail. To the northwards of the *Wheatſand* goeth in a Deep: which Men may ſail up in the old *Maes* in *Dordrecht*, in it lye alſo two buoys: he that will run in there, let him run in by the foreſaid Marks of the Steeple of *Rotterdam* and the Wood of Trees, ſo long, until that the Steeple of the *Brill*, come to a Tiled Houſe, which ſtanding, run then he ſhall not miſs the buoy. Being paſt the old *Maes*, you muſt ſail up, keeping the middle of the Channel paſt *Vlaerdingen* unto five Sluces; from thence you muſt chuſe the South ſhore, and run cloſe along by it until you be over a little bank, whereupon is at low water eleven or twelve foot water, nearer the South ſhore the deeper, lying thwart over the *Maſe*, and you ſhall be paſt that, then go right towards the Head of *Scheidam*, there you ſhall have the deepeſt water.

If you will go to *Delfs-haven*, then (being paſt *Scheidam*) keep the ſounding of the North ſhore, and run along by it until you come before the Haven, and anchor there. But if you will ſail to *Rotterdam*, then run along by the North ſhore ſo long, until that *Overſchie* and the houſe of *Spin* come one in the other, then edge over, or a little ſooner, to the South ſhore, and run along by it, or bring the Steeple of *Vlaerdingen*, when you are paſt the Head of *Scheidam*, over the third houſe upon the *Scheidams* Head, and keep that ſo ſtanding ſo long until it and the Head *Charlois*, whereupon ſtandeth a little Wood of Trees, come one in the other, and ſo you ſhall on the larboard ſide find a little ſhoald Plate, that lieth about *Delfs-haven.*

half ways betwixt *Scheidam* and *Delfs-haven*, and run along to the ſouthwards of the ſhoald, that lieth before the Haven. Upon that foreſaid Plate remaineth no more than ſeven foot water, and upon the ſhoald before the Haven, but two or three foot water, and are both very ſteep: When that foreſaid Mill and the Head of *Charlois* come one in the other, then keep them ſo ſtanding until that you come thwart of the new Head of *Rotterdam*, ſail then towards the Town, and cloſe along by it, in betwixt the Town and the Plate, there you may anchor.

For to find the Souther Channel (coming in of the Sea) before you can ſee the Capes, you muſt bring the Steeple of the *Brill* (which is a thick flat Steeple, without any Spire or ſharp top upon it) Eaſt South-eaſt from you, or ſomewhat more eaſterly or ſoutherly, according as you get ſight of the Capes, then bring them one in the other, and run ſo right in, you ſhall without fail run in ſight of the outermoſt buoy, which lyeth in three fathom at low water.

From the outermoſt buoy to the ſecond and third buoy, you muſt ſail yet right in with the Cape, the ſecond buoy lyeth in thirteen, and the third in eleven foot, being thwart of it, the Steeple of *Goeree* cometh a little upon the foot-ſtrand of the Land of the *Brill*. The fourth buoy, the ſame lieth from the third buoy, yet near upon the Courſe right in with the Cape, but a little more ſoutherly.

Betwixt theſe buoys is the ſhoaldieſt of the *Maſe* ten foot, it beginneth by the fourth buoy again to be deeper, that lieth in eleven foot. From without unto the fourth buoy the Channel is of a good breadth, ſo that you may turn in to windwards a good ways on both ſides of the buoys, and borrow of the ſhores on both ſides by your Lead, but right along a little to the ſouthwards of the buoys, is the perfect deepeſt water. The fifth buoy lieth from the fourth Eaſt North-eaſt, and North-eaſt and by Eaſt, on the North ſide of the deep on the *Honde-plate*, in eleven foot, which you muſt leave on the larboard ſide, and run in about to the ſouthwards of it. From the fourth to the fifth buoy, along to the ſouthwards of the buoys, in the right Fair-way,

Fair-way, it is deep, thirteen, fifteen, ſixteen, and ſeventeen foot, and by the fifth buoy five fathom. The ſixth buoy lieth from the fifth Eaſt and by North, in eleven foot and an half, alſo on the North ſhore or *Honde-plate*, along to the ſouthwards of it, the Channel is at the narroweſt, and five and ſix fathom deep; the South ſhore is thereabouts very ſteep, cloſe to it, it is ſix, and ſix fathom and an half deep. Aſſoon as you come paſt the ſixth buoy, then cometh *Maſe* land Sluys and the Steeple of *Vlaerdingen* one in the other; keep them ſo one in the other, and run in ſo right with them, ſo long, until that you get the houſe of *Lucht* over *Ambroeck*, and then you ſhall run far enough along to the Northwards of the *Polder*, and by the ſide of the ſeventh buoy; along in the right deep, you ſhall find in this fair way four and four fathom and an half, go then towards the *Vrill*, or upwards along where you deſire to be, as is ſaid here before in the Deſcription of the Norther Channel. *Maſe land Sluce.*

All theſe foreſaid depths, and thoſe which follow in the *Goerees Gat*, are ſet there (as alſo in the Card) according to the loweſt water of common Tide, and it floweth there ſix foot up and down.

The Goerees Gate.

BEtwixt the Land of the *Brill* and *Goeree* go in alſo two Channels, the Northermoſt is called *Quacks-deep*, and is not for great Ships, but only for Smacks and ſmall Ships, the other is the *Goerees-gate*. Betwixt theſe two Channels lieth a great Plate, *Hinder*, which at low water is no deeper than five, ſix and ſeven foot. To the northwards of it goeth in the *Quacks-deep*, and to the ſouthwards of it the *Goerees-gate*.

For to find the *Quacks-deep*, coming in out of the Weſt, you keep the Steeple of the *Brill* Eaſt from you, and run ſo in, until that a great Countrey-houſe, which you ſhall ſee ſtand alone a little within the Point of the *Quack*, come to the ſouthermoſt ſand hills of the Land of the *Brill*, which ſhall then ſtand

near about the South-eaſt from you, keep that then ſo ſtanding, and run ſo right in until that *Ooſt-voorn* come to the Weſtermoſt ſands hills, then run in alongſt by the ſtrand, ſomewhat more Southerly until that *Goeree* come to the Eaſtwards, or within the ſand-hills and then you ſhall be paſt the Eaſt point of the *Hinder*, which the Pilots call the *Buyen*, run then towards *Goeree*, or to the Eaſtwards to *Hellevoets ſluce*, where you deſire to be.

Goeres-gate

For to ſail in at *Goerees-gate*, you muſt bring the ſteeple of *Goeree*, and the Cape upon the land of *Goeree*, one in the other, and then they ſhall ſtand Eaſt and by South, and South-eaſt from you: or if you cannot ſee the Cape, then bring the Steeples Eaſt and by South, or Eaſt South-eaſt from you, according as you ſhall have the Wind, ſail in right with them until you come hard aboord the Strand, and within a balls caſt in along by it Eaſt and by North, and Eaſt in ſo long until that the land do fall away more to the Southwards, thereabout runneth off from the ſhore a little Tail, which men might ſail within, in going out, but not in coming in: there you muſt edge a little further off from the ſhore, being paſt that, luff up again towards the ſhore, or Haven of *Goeree*, and anchor there before it, or elſe if you will run up to *Hellevoet-ſluce*, then bring the Mill which ſtandeth to the Weſtwards of *Goeree*, a little to the Northward of the Steeple of *Goeree*, keep them ſo ſtanding, and ſail ſo up to *Hellevoet-ſluce*, and you ſhall not come near the Plate which lieth over againſt, or to the Southwards of *Hellevoet-ſluce*.

When you ſail in at the *Goerees-gate* with a bare Southerly wind, and that you cannot bring the Cape and Steeple one in the other, you may bring the Steeple well Eaſt South-eaſt, or a great Capſtane bars length to the Northwards of the Cape, and then run over until you come againſt the Strand, and ſo you ſhall run over the tail of the *Hinder* in fourteen or fifteen foot at low water, but when the Cape and Steeple are one in the other, you ſhall not have leſs than nineteen or twenty foot. Being come over the tail of the *Hinder* in the right deep, it is ſix, ſeven, and eight fathom deep. A little within the Cape, or almoſt thwart of it, is the narroweſt of the Channel, further in it

is

is wider, on the north ſide towards the *Hinder*, it is riſing ground, but the South ſhore along by the Strand is very ſteep.

The Tides, Streams and Courſes of theſe Places.

UPon *Wieringe-flat* maketh full Sea a South-eaſt or North-weſt Moon. Before *Teſſel*, in the *Coop-vaerders* Road, an Eaſt South-eaſt, and Weſt North-weſt Moon.

Without the Grounds or Shoalds of the *Teſſel* an Eaſt and Weſt Moon maketh the higheſt water, and in the entring of the *Teſſel* an Eaſt and by South, and Weſt and by North Moon: but the Flood goeth a good while longer in; and likewiſe runneth the Ebb alſo longer out, then the loweſt water. When the Moon is South or ſomewhat more Weſterly, it beginneth apparently to flow without on the Strand, and likewiſe upon the Shoalds.

The fore-flood and after-ebb out of the *Teſſel* fall both one with the other North North-eaſt thwart over the Grounds and Channel, and right out at the *Spaniards* Channiel, until half flood, and to the contrary, the fore-ebb with the after-flood fall right in at the *Spaniards* Channel South South-eaſt over the South Grounds, and thwart over the *Slenk*, and the other Channels, until half ebb. And a little while before half flood, the Flood beginneth to run right in at the Channels, and again a little before half ebb, the Ebb beginneth to ſet right out at the Channel. Therefore he that will ſail into the Channels, muſt reckon his Tides very well, wherein conſiſteth very much. Without, before the Channel in the Sea, the Tide runneth about with the Sun, ſo that when as a Ship doth lie at an Anchor without the Channels, and hath neither good nor hurt of the ways of the Sea, it ſhould have but a little ſtill water.

In the North Sea the Tide falleth round, more than half Tide, upon the Broad Fourteens it turneth about with the Sun or the Moon, and falleth but a quarter Tide right along the Sea. Nea-

rer

rer the Coaſt of *Holland* and *Zealand* the Tide falleth (whether it be Flood or Ebb) ſomewhat ſloping towards the Land, but in the midſt of the Tide it falleth right along the Sea, and in the laſt of the Tide it ſetteth to Seawards, towards the Weſtwards or the Northwards.

Marſdeep. Betwixt the *Marſ-deep* and the *Maſe* in the fareway, the fore-flood cometh out of the North Sea, and turneth about with the Moon, falling towards the Land North-eaſt, and North-eaſt and by North.

The Fiſhermen of the *Maſe* ſay, that when they are out of ſight of the Land, they can perceive in calm weather by the turning about of the Tide, whether they be to Northwards or to the Southwards of the *Maſe*. Somewhat to the Southwards of the *Maſe* the after-flood turneth about againſt the Sun, but to the Northwards of the *Maſe* it turneth about with the Sun, until the laſt quarter; and then it ſetteth towards the Shore, the Coaſt next unto it. They ſay alſo, that along the Coaſt of *Holland* men have no help of the Ebb in turning to windwards, towards the *Maſe*, except they be without ſight of the Land; becauſe there go no Ebbs by the Land, when the wind is to the Southwards or to the Weſtwards.

Before the *Maſe* a South-weſt and by Weſt, and a Northeaſt and by Eaſt Moon maketh a high water.

Before the *Brill* a South-weſt and South-weſt and by South, and North-eaſt and North-eaſt and by North Moon.

Before the *Old Maſe* a South-weſt and North-eaſt Moon.

Before *Rotterdam* a South-weſt and by weſt, and North-eaſt and by Eaſt Moon.

Before *Dordrecht* a Weſt South-weſt Moon.

In the *Goerees-gate* and before *Goeree* a South-weſt and by South, and South South-weſt Moon.

Before *Hellevoet-ſluce* a South-weſt and by South Moon.

Betwixt the *Marſ-deep* and the *Maſe* in the Fareway, the fore-flood cometh out of the North Sea, turneth about by little and little North-eaſt and North-eaſt and by North towards the Land.

In the Sea thwart of the places, (without ſight of the Land)

it

it is a point or a point and a half later full Sea, the further from the Land the later.

Not very long after that the Flood beginneth to go without the *Maſe*, it doth begin alſo to go into the *Maſe*, but the after-flood falleth very ſtrong in, and ſo likewiſe in the *Geerees-gate*. Cloſe before the Channels by the Land, the Tide turneth about with the Sun, ſo that when the after-flood falleth in the Channels, it turneth to the South-wards, and becometh again a running Ebb: the after-ebb falleth again thwart off to Seawards out of the Channel.

Of the Depths and Grounds about theſe Places.

FIve or ſix leagues without the *Texel* lieth the Broad fourteens, lying from thence North-eaſt with a ſmall tail, which lieth about North from the Texel, and North-weſt from the *Fly*: to the Southwards it runneth with he Eaſt ſide againſt *Catwijck* or *Scheveling*, but the Weſt ſide lieth off at leaſt eleven or twelve leagues thwart off to Seawards from *Nortwijck* and *Catwijck*, it is a Bank moſt of fourteen fathom deep, in ſome places ſomewhat more or leſs. Betwixt it and the Land it is again 18. and 19, and to the Northwards 20 fathom deep. When you come over it about the *Texel* or the *Fly*, and come again in 16, or 17 fathom towards the Land, then you ſhall begin to ſee the Land.

There runneth off to the Southwards into the Sea from the Coaſt of *Holland* ſmall banks, which are ſomewhat broad and ſhoald by the Land, and run off ſharp and deep to the end. the firſt the Fiſhermen call the Small-eight, and beginneth a little to the Southwards of *Egmond* upon the Sea: the third and Southermoſt the Hard, a little to the Northwards of *Sandfoort*.

The high Steeples of *Holland* and *Weſt-Frieſland*, as *Egmond* within, *Wijck* upon the Sea, *Sandfoort*, and others, men may ſee before they can ſee the Sand-hills five leagues without the Land,

in,

in 14, or 15 fathom, that is, upon the South end of the Broad fourteens but *Camperdown* and the Sand-hills thwart of *Haerlem*, they may ſee before they can ſee ſome of the Steeples. The Steeples along the Coaſt are moſt of them flat, except *Beverwijck*, *Schevelingen* and *Sandfoort*.

Before the *Maſe* and *Goeree* men may ſee the Land in fourteen and fifteen fathom.

How theſe Lands do ſhew themſelves at Sea.

Thus ſheweth Huiſdown, *when it is from you* East South-eaſt.

Thus ſheweth it ſelf thus, being East *and by* North *from you.*

The Coaſt of Holland *appeareth thus, as is demonſtrated by joyning the two foregoing Figures A A together betwixt* Huiſdown *and* Wijck *upon the Sea, when you ſail along by it, about two leagues off the Land.*

Thus ſheweth the Coaſt of Holland *betwixt* Wijck *upon the Sea and the* Maſe, *when you ſail along the ſame, about two leagues from the Land, as is demonſtrated by joyning theſe two figures* B B *together.*

B b

When you are before the Maſe, *then the Land by North ſheweth thus: as is demonſtrated by joyning thoſe two figures* CC *together.*

Recaigne. The Channel of Goeree. South.

Goeree Outdorp, The Cape of Goeree.

Being before the Maſe, *and North-weſt and by Weſt from the* Brill, *then appeareth the Land from the South of the* Maſe *thus: as is ſhewed by joyning theſe two figures* A A *together.*

When you are before the Channel of Goeree, *about a league without the Land, then the Land doth ſhew it ſelf on both ſides thus: as is demonſtrated by joyning theſe two foregoing figures* B B *together.*

Thus ſheweth the Land of Goerce, where the Cape and Tower come over one another, and that you are a great league without the Land: as is demonſtrated by theſe two figures C C *joyned together.*

XV Demonstration.

The Channels of Brewers-Haven, Sierick-Sea, *the* Vere, *as alſo the Channels of* Zealand, *in the* Wielingen.

BEtwixt the Land of *Goeree* and *Schowen*, there go in alſo two Channels, the northermoſt is called the *Kevitſen*, (which is only for ſmall Ships) the ſouthermoſt for great Ships, is called the *Brewers-Haven* Channel. There lieth betwixt them a great dry Sand, called the *Springer*, which floweth not under, but with very high floods.

For to find the *Kevitſen*, you muſt bring the Steeple of *Zierickzee* South-eaſt and by South, or a little more ſoutherly from you, and then you ſhall eſpy upon the Land of *Schowen*, about the Steeple of *Zierickzee* a wood of trees, bring that and the foreſaid Steeple of *Zierickzee* one in the other, and run ſo right in until you come againſt the Sand, ſo ſhoald, or near, as you can, and then you run far enough along to the weſtward of the Weſt head. When you come within the Weſt head againſt the Sand, on the South ſide, then go in Eaſt along by the foreſaid dry ſand the *Springer*, at the end of the foreſaid dry ſand ſhooteth off alſo a point under water, the which you muſt

ſound

ſound for, being paſt that run then directly with *Brewers-Haven*, as is ſhewed in the Card. In this Channel it upon the ſhoaldieſt ten foot deep.

Before the Land of *Schowen* thwart of the *Brewers-haven* Channel lie 3 banks, the outermoſt, called the *Breebank*, lieth a kenning without the Land, upon which it is 7 fathom deep, and again within it 19 fathom deep, upon the ſecond nearer the ſhore it is 5 fathom deep, and again within it 7 fathom deep, the third, called the *Ooſter*, lies cloſe by the Land, and runneth into the Eaſtwards, betwixt *Schowen* and the Land of *Goeree*, upon it is no more than ſix foot water; when you will ſail into the Channel of *Brewers-haven* you muſt go about to the Weſtwards of the ſame. *Brewers-Haven.*

Upon the Weſt end of *Schowen* ſtand two Capes, bring them one in the other, and run ſo right in with them until the Steeple of the *Reniſſe* (which Steeple is ſomewhat ſharp) come to the *Blenk*, or *Woolſack*, that is a high white Sand-hill (which ſheweth it ſelf out in whiteneſs high above all the other Sand-hills) then leave the Capes, and run in by the marks of the *Blenk* and *Reniſſe*, until that *Outdorp*, a little white Steeple upon the land of *Goeree*, come to the Steeple of *Goeree*, and ſo you ſhall go in betwixt the *Ooſter* on the Larboord ſide, and the Hill on the Starboord ſide, and along a little to the ſouthwards of the outermoſt buoy, until you come within the *Ooſter*. When that *Outdorp* and *Goeree* are one in the other, then leave alſo the foreſaid marks of *Reniſſe*, and run in right with *Goeree*, until that you come by the ſecond buoy, or (if there lye no buoys) until that the *Bommence* come a little without the *Ooſter* Tail, that is a point of *Schowen*, lying out a little to the Weſtwards of *Brewers-haven*, ſail ſo right in until you be paſt *Brewers-haven*.

This Channel of *Brewers-haven* is a broad and deep Channel, very convenient for great Ships, he that muſt turn in or out to windwards may run along a good way on both ſides, as well of the outermoſt as of the ſecond buoy; but to the ſouth-wards of them it is no deeper than the common Fare-way. The third buoy is a buoy with a Tail which is off from the *Ooſter*, which *The Channel of Brewers-Haven.*

which you may not go to the Northwards of until you are very cloſe along by it; all along by the Strand of *Schowen* it is deep and ſteep, you may run cloſe by it from the outermuſt buoy unto *Brewers-haven*, there is nothing that can hurt you, the ſhoaldieſt of this Channel is eighteen or nineteen foot at leaſt, a league without the land in the coming in betwixt the *Oeſter* and the hill. Further inwards it is four, five, ſix and ſeven, and at ſome places ten and eleven fathom, as it is ſhewed in the Card by the numbers of feet, and all at low water.

The Keel, *the* New-deep, *the* Velt, *and the* Room-pot.

MEn may run into *Zierickzee* through divers Channels, through the *Keel*, the *New-deep* the *Velt* and the *Room-pot*. For to ſail through the *Keel*, then run in as is before ſaid of the Channel of *Brewers-haven*, firſt in by the marks of the *Blenk* and *Reniſſe*, ſo long until that *Ter Veer* come to the Weſtermoſt point of *Schowen*, called the *Hoot*, keep them one in the other, and run ſo in until you come by the Strand, and then forth by it, and you ſhall find ſo in the *Keel* at the ſhoaldieſt eighteen and nineteen foot, and coming againſt the point of the *Hoot*, four or five fathom. Betwixt the *Hoot* and the *New-ſand* (which falleth at the Eaſt at ſome places dry) run all along by the land of *Schowen*, until you come thwart of the ſouthermoſt Cape of *Schowen*, edge then ſomewhat off from the ſhore towards the *Baniard*, for to avoid a Share which lieth off from *Schowen*, which you might ſail within when you come out of the Sea, there lieth a buoy upon the point, whereby it is good to be known: being paſt that, run all along by the ſhore, until you come to *Zierickzee*, ſomewhat within the buoy, upon the point of the Share there is lately laid another little buoy, for thoſe that will ſail that way out, for that they may not ſail upon the Eaſt ſide of the foreſaid Share.

For to ſail in at the *New-deep* you muſt look out for the two ſtone fire-beacons, ſtanding a little to the ſouthwards of the fore-

foreſaid Capes of the Channel of *Brewers-haven*, bring the innermoſt a hand ſpikes length to the ſouthwards of the outermoſt, and run in betwixt the Hill and the *New-ſand* in ſixteen, ſeventeen and eighteen foot, go in along the foreſaid marks, until that you come by the Strand, and then come into the *Keel*. If you bring the fire-beacons one in the other, and ſail ſo right in, you ſhall then run over the Tail of the Hill in eleven or twelve foot. The Hill is a Sand ſomewhat flat, which men may come near to the South ſide by their lead; but the *New-ſand* is very ſteep, and the Sea breaketh very much upon it. When as that you come in by the Srand into the *Keel*; then run in along by the ſtrand, as is before ſaid in the deſcription of the *Keel*.

For to ſail in at the *Velt*, you muſt obſerve theſe marks here under deſcribed: almoſt upon the ſouthermoſt end of *Schowen* ſtandeth a Tower alone in the field, with a Cape upon it, called *Weſt ſchowen*, bring that Tower a Capſtane bars length to the ſouthwards of the foreſaid ſouthermoſt Cape of *Weſt-ſchowen*, and run ſo right in, and then you ſhall run through betwixt the *New-ſand* and *Baniard*, and ſhall find upon the ſhoaldieſt, thwart off the outermoſt point of the *New-ſand*, twelve and fourteen foot; being paſt that, there will be again fifteen, ſixteen and eighteen foot, and by the ſtrand twenty foot deep. When you come in by the ſtrand, run all along by it until you come even to *Zierickzee*, as here before is ſaid of the *Keel* and *New deep*. When you run in at this Channel, you muſt take very good heed of the *Baniard*, which is very ſteep upon the North ſide, cloſe to it there is three, four, and five fathom water, but thwart of the foreſaid ſtrand which lyeth off from *Schowen* ſix and ſeven fathom deep The *New ſand* is indifferent flat on the ſouth ſide, that you may borrow of it by the lead.

The Veer-gate.

FOr to ſail in the *Veer-gate* (coming from the Northwards) you muſt keep *Weſt-capel* not to the Weſtwards or the South from you and then you cannot come too neer the *Baniard*: if you

you bring *Weſt-capel* to the Weſtwards of the South from you, you ſhould lightly ſail upon the *Baniard*, run ſo right with *Weſt-Capell* until that *Middleburgh* come over *Eaſt-Capell*, then you are to the end of the *Baniard*, and ſail then right with *Eaſt-Capell* and *Middleburgh* until *Cortgeen* come through, or a great Capſtane bars length to, the Southwards of *Weſt-kerk*, they are two Towers ſtanding in the ſunken land, and ſhall be then about Eaſt ſouth-eaſt from you, keep theſe Towers ſo ſtanding, and run in ſo right with them, and you ſhall run in ſight of the firſt Buoy of the *Veer-gate*. In the *Veer-gate* lye three Buoys with two bottoms, of faſhion like great Hogs-heads, which you muſt leave all on the ſtarboard ſide. Before you come to the firſt Buoy, you ſhall ſail by another buoy on the larboord ſide, lying upon the point of the *Polle*, which is a great point of the *Baniard*, that is a Pear buoy, of faſhion like all other Sea buoys, which lye in the *Maſe* or elſewhere. The foreſaid firſt buoy in the *Veer-gate* lyeth in three fathom and a half. From the firſt to the ſecond and third buoy, the courſe is South-eaſt and by Eaſt, or ſomewhat more ſoutherly, but you may eaſily ſee from one to the other. The ſecond and third buoys lye two fathom, each upon a point of a Plate called the *Maid*. Over againſt the third buoy lyeth a ſhoald called the *Unreſt*, which lieth with a long ſharp point towards the third buoy, ſo that it is not there very broad betwixt them, therefore you muſt run cloſe along to the Northwards of the buoy: betwixt the buoy and the foreſaid point of the *Unreſt*, it is not deeper than twelve or thirteen foot, but thwart of the firſt and ſecond buoy it is broad and deep enough. Being paſt the third buoy, ſail then right to *Ter-Veer*. Over againſt *Ter-Veer* lyeth a Plate, called the *Scotſman*, which you have only to avoid.

Veer-gate.

Roompot.

If you will go in at the *Roompot* to *Zierickzee*, and as you are betwixt the Pear buoy and the outermoſt buoy of *Veer-gate*, cometh *Domburgh* to the *Hoot*: keep them one in the other, and you ſhall run along by two buoys more, which ſhall lie on the larboord ſide along by the *Polle*, and you ſhall ſee one buoy with a Tail, lying over againſt the third buoy of the *Polle*, betwixt

betwixt theſe two buoys you muſt run thorough, leaving with the Tail on the ſtarboord ſide, and run about by it to the Eaſtwards. There lye alſo two buoys with Tails (beſides the foreſaid) upon the *Woolplate*, you may eaſily ſee from one to the other, theſe you muſt leave on the ſtarboord ſide, and run along to the Northwards of them, about Eaſt ſouth-eaſt on, ſo long that the ſteeple of *Koukerk* come even without the point of *Schowe*, run then in right with that point, and about it, and ſo along by the ſhore unto *Zierickzee*.

When that you run towards the point of *Schowen*, then you ſhall ſail through betwixt two buoys more, the one lying one the ſtarboord ſide, upon the Eaſtermoſt point of the *Baziard*, or *Hoogplate*, and the other with a Tail on the ſtarboord ſide, upon the point of another plate, which is called *Poolvoet*, lying betwixt the land of *Schowen* and *Oreſand*. All the buoys with Tails you muſt leave, in ſailng in, on the Starboord ſide, and thoſe without Tailes on the Larboord ſide.

The Fiſhermen run by day, moſt about to the Southwards of the *Poolvoetplate*, and leave the foreſaid buoy with the tail then on the larboordſide; that plate is ſomewhat flat, that men may borrow of it by their Lead, but they muſt ſound quick: but by night they run by *Schowen* cloſe along by the ſhore, which is exceeding ſteep. *Poolvoet-plate.*

The Channel betwixt the Iſland *Walcheren* and *Flanders*, hath divers deeps and channels, where men may ſail in and out through with great Ships, as the *Botkill*, the *Doorloy*, the *Splete* and *Wieling*. It is commonly called after one of the chiefeſt of the ſame, with the name of the *Wielings*. The greateſt ſhoalds, betwixt which theſe foreſaid channels do run through, are: the *Raſſes*, the *Raen*, the *Engliſh Polle*, and the *Innerbank*. The *Raſſes* lye along the Weſt ſide of *Walcheren*, the *Raen* to the Weſtwards of it.

The *Engliſh Polle* betwixt them and the Coaſt of *Flanders* lying off to the Weſtwards with a long ſmall rib, unto thwart of *Oſtend*. The *Innerbank* lyeth betwixt the Eaſt end of the *Engliſh Polle*, and *Caſſand*, which is alſo called the *French Pol'*, or the *Ript*.

The Botkill.

FOr to ſail out at the *Botkill*, you muſt from *Fluſhing* run with a Cables length along by the ſhore through betwixt the Land and the *Geer* and the *Raſſes*, the ſhore is very ſteep, ſo that men may come cloſe by it with great ſhips without any danger, the *Raſſes* are flat on the Eaſt, or the inner ſide towards the land. To the Eaſtward., or to the Southwards of *Souteland* in that Fare-way it is five and ſix fathom deep, but to the Northwards or to the Weſtwards it is deeper, and thwart of *Weſt-capel* eight and nine fathom. When the Church of *Weſt-capel* (which hath a flat ſteeple) cometh over the mill, thwart of that runneth a Channel through betwixt the North and Eaſt *Raſſes* Weſt ſouth-weſt into the Sea, where remaineth at low water no leſs than two fathom water, keep *Weſt-capel* and the foreſaid mill one in the other, and run out ſo by them.

When *Buyes* Church cometh over the foreſaid mill of *Weſt-capel*, then keep them one in the other, and you ſhall run then right out at the *Botkill* through betwixt the North Raſſes on the larboord ſide, and a ſand called *Calloo* on the ſtarboord ſide. In the *Botkill* is not leſs than four foot and a half depth, but upon both the *Raſſes* remaineth at low water no more than two foot and a half, and upon *Calloo* three or four fathom.

The Quernes. To the Northwards of the Sand *Calloo* lyeth yet a plate, called the *Quernes*, lying Northwards almoſt until thwart of *Domburgh*; betwixt them both is a Channel of four or five fathom depth, called the *Eaſter-gate*. For to ſail out there, or to find it coming in out of the Sea, you muſt bring *Weſt-capel* to the Northermoſt head, which is a head very good to be known, and run out in or thereby. Betwixt the *Quernes* and the Land goeth out yet a Land-deep of three fathom and a half. For to find that coming in out of the Sea, you muſt run to the ſhore thwart of *Domburgh* (which is a ſharp ſteeple) into three fathom or two fathom and a half, and keep the ſounding of the ſhore ſo near as you pleaſe, and run in ſo along by the heads, until

until you are within. When you come in at any of theſe Channels, and are come ſo far to the Eaſtwards, as betwixt *Buyens* Church and *Soutland*, and that you muſt turn to Windwards with an Eaſterly Wind, then you may ſail through betwixt the *Eaſter Raſſes*, and the plate to the Weſtwards of it, called the *Geer*, and ſo come out in the broad Channel into the *Doorloy* and *Splete*, and run ſo about to the Southwards of the *Geer*, until that you are come to *Fluſhing*.

About two leagues without the land of *Walcheren* lieth a long ſmall bank lying South-weſt and North eaſt, called the *Stone-bank*, upon the midſt whereof there is no more than two fathom, and upon the North end of it three fathom water. He that will ſail in or out at the *Botkill*, or the Channels to the Northwards of it, the *Eaſtergate*, or *Land-deep*, muſt ſail about either to the Northwards or to the Southwards of that *Stone-bank*: when *Middleburgh* cometh over *Domburgh*, then are you thwart of this *Stone-bank*, but if you bring *Middleburgh* half way betwixt *Domburgh* and *East-capel*, and ſo ſail to the land, then you run along to the Northwards of it. Or elſe if you bring *Weſt-capel* Eaſt South-eaſt from you, in a black valley of the Sand-hills, and ſail ſo right in, then you run along to the Weſtwards or the Southwards of it. Middleburgh.

Within the *Stone-bank* it is again eight or nine, and at ſome places ten fathom deep. Upon the foreſaid marks and courſe: to wit, *Weſt-capel* Eaſt South-eaſt from you in the black valley, you may ſail right in at the *Botkill*; when that *Eaſt-capel* cometh then ſomewhat through *Domburgh* or to the Eaſtwards of it, then you ſholl get deeper water, go then towards the ſhore, and ſo along by it as is before ſaid A little from the South-weſt end of the *Stone-bank* lyeth yet another, but it is not long, called the *Ooſter-bank*, upon it remaineth at low water about four fathom.

The Doorloy.

FOr to ſail from *Fluſhing* out at the *Doorloy*, with Ships that draw much water, you muſt ſet ſail when that the water is flowed an hour or two, for to come with half flood, or againſt the higheſt water to the ſhoalds, go from *Fluſhing* firſt along by the ſhore, and then Weſt North-weſt, until that *Weſt-capel* come within two ſhips length to the point of the ſand-hills, bring that alſo not further out, and not nearer to the point of the ſand-hills, for elſe you ſhould ſail upon the *Raen*. When *Weſt-capel* ſtandeth of, and S. *Anne* (a flat Steeple in *Flanders* to the Weſtwards of *Sluce*) ſtandeth amongſt the Eaſt ſand-hills of *Caſand*, then go North-weſt and by Weſt out at the *Doorloy*. When S. *Anne* cometh then to the Weſt-wards of that foreſaid ſand-hill, keep that under, or right to the Eaſt ſide of the foreſaid ſand, and go ſo out North-weſt and by Weſt, and you ſhall go clear off the *Raen*, and *Raſſes*. If you bring *Weſt-capel* without the ſand-hills before S. *Anne* come without the foreſaid ſand-hills of *Caſand*, then you ſhall be too far to the Northwards, and too neer the *Raſſes*. Or if you bring S. *Anne* without the ſand-hills of *Caſand*, before *Weſt-capel* come to the end of the ſand, then you ſhall be to the Southwards, and ſhall come againſt the *Raen*, but when you bring *Weſt-capel* to the point of the ſand-hill, and S. *Anne* without the ſand-hills of *Caſand* one as ſoon as the other, then you are amid the Channel of the *Doorloy* right in the fareway.

Doorloy. For to find the *Doorloy* coming in out of the Sea, you muſt run to the *Raen* by the lead, until that *Weſt-capel* come within a maſts length neer to the *Sconce*, and ſail ſo right in, or take the ſounding of the *Raen*, and run along by it, until S. *Anne* come to the foreſaid Eaſt ſand-hill of *Caſand*, then go in along South-eaſt and by Eaſt, and you ſhall be ſoon over the ſhoaldeſt, and find deeper water; but you muſt reckon well your Tides, for the flood falleth into the *Doorloy* firſt South (as alſo the after-ebb) afterwards South South-eaſt, and at laſt to the

the Southwards. Therefore if you will go in at the *Doorloy* with a fore-flood, you muſt go at leaſt Eaſt South-eaſt, or elſe, if you ſhould go in upon your direct courſe, you ſhould be lightly carried againſt the *Raen*. Coming then out of the Sea along by the *Raen*, until S. *Anne* be hidden amongſt the ſand-hills of *Caſand*, then go on Eaſt South-eaſt, until that *Weſtcapel* come within the point of the ſand-hills, and run then boldly right on with *Fluſhing*.

In dark weather men may ſound along by the *Raſſes*, when that you keep the caſtle of Sluce to the Eaſtwards of the foreſaid ſand-hill upon *Caſand*, then you cannot take hurt of the *Raen*, but when the Church of Sluce ſtandeth to the Weſt ſide of the foreſaid ſand-hills, then you are thwart of the ſhoaldeſt of the *Raen*.

The Splete.

FOr to ſail from *Fluſhing* out at the *Splete*, you muſt go on firſt WeſtNorthweſt, until *Weſt-capel* come almoſt to the point of the ſand-hills; but not without it, or that the Steeple of *Middleburgh* come to the inner ſand-hill, then go Weſt ſouth-weſt, and then you run out at the *Splete*, which is more than a great half league broad, and at low water upon the ſhoaldeſt four fathom deep. Betwixt *Sonteland* and *Diſhoeck* lieth a high ſand-hill, which is at the Eaſt end ſomewhat ſteep, called the *Doorn-hill*, to the Eaſtwards of it lieth another ſand-hill, which is ſomwhat long, not altogether ſo high as the *Doorn-hill*, with a clift or little dale in it, which doth divide them in two parts, the ſouthermoſt is called the Inner ſand-hill. When the Steeple of *Middleburgh* cometh over that Inner ſand-hill, or in that foreſaid clift, and keep that over it or in it, and then you run out at the *Splete*, and can take neither no hurt.

The *Engliſh Poll* is ſteep, but with eaſterly Winds men may borrow of it by the lead. The *Raen* is flat on the inner ſide as well as on the out ſide, ſo that men may ſound out along by it all the *Splete*; when you cannot have ſight of the foreſaid marks

The Engliſh Poll.

marks in dark weather, and it is ſo broad, that men have an half hours work for to ſail thwart over it, but the *Engliſh Poll* is ſo narrow, that men may run over it with four or five caſt off the lead. When *Ardenburgh* cometh without the foreſaid ſand-hills of *Caſand*, then you are paſt the dry *Raen*, but it lieth yet out to the Weſtwards with a great flat, ſo far to the Weſtwards that then *Bridges* cometh to the Eaſtwards of *Blankenburgh* in the Gallow ſherds.

From the end of the *Engliſh Poll* lieth a long rib, about a ſhot of a caſt piece broad; called the *Ript*. When *Blankenburgh* ſtandeth South-eaſt and by Eaſt from you, it is upon the *Ript* at low water ſix fathom. A ſhot of a caſt piece to the Northwards of that *Ript* it is deeper, and ſoft ground. Alſo when you come towards the South or South South-eaſt a ſhot of a caſt piece over the *Ript*, it will be preſently a half fathom deeper, and ſoft ground, that is then the other Channel of the *Wielingen*.

Therefore when you come out of the Sea, and will ſail in the *Splete*, edge to the Coaſt of *Flanders*, when you are (by your reckoning) paſt *Oſtend*, and borrow to it by your lead, until that you get hard ground, and ſhoalder water, it is for certain the foreſaid *Ript*: Having found the ſame in ſix, ſeven, or eight fathom, according as you ſhall be to the Eaſtwards or the Weſtwards, then edge off again to the Northwards into the Sea, until it begin to ſhoald and be hard ground; keep ſo the ſounding of the *Ript* until you find deeper water and ſoft ground, run then Eaſt North-eaſt, and edge now and then to the Southwards towards the Northwards the North ſide of the foreſaid *Ript* until that *Bridges* cometh to *Liſwegen* (being a flat and very thick Steeple) or that *Blankenburgh* ſtand South from you, then you come thwart of the point *Raen* into the *Spleten*. Then bring the Steeple of *Middleburgh* over the foreſaid Inner ſand-hill, betwixt *Zouteland* and *Diſhoeck*, and run in right with it Eaſt North-eaſt until that the Caſtle of *Sluce* come to the Eaſtwards of the foreſaid Eaſt ſand-hills of *Caſand*, ſail then right on with *Fluſhing*, and ſo you ſhall go clear both off the *Raen* and the *Polls*. If it ſhould happen in dark

dark or miſty weather, when you cannot ſee *Middleburgh*, run in by lead along by the North ſide of the *Ript* East North-eaſt until you find ſhoalding and hard ground of the bank, and ſo you ſhall run in betwixt the *Race* and the Bank. When *Heyſt* com eth to the fire-beakon, thwart of that is the Bank, or the *Engliſh Poll* at the ſhoaldeſt, to the Eaſtwards thereof the bank waxeth deeper; and being come paſt the ſhoaldeſt, if you edge towards the bank, you ſhall find deeper water, and may run over there at half-flood with eighteen foot, but it is not good to do it, for not to ſail upon the *French Poll*, but keep all along the ſounding and hard ground of the Bank; and ſhape your courſe a little more Eaſterly for to avoid the *Raſſes*, which lye thwart of *Souteland*, and are ſteep. *Heyſt.*

When you are come ſomewhat further in, go then Eaſt on towards *Fluſhing*, and you ſhall not come near any ſhoalds. Thwart through the *Race* goeth a *Slenk*, where remaineth at low water not leſs than two fathom and a half water; for to find it coming in out of the Sea, you muſt bring *Aerdenburgh* a little without the point of the Sand-hills of *Cafand*, or *Weſtcapel in Flanders* a little to the Eaſtwards of *Knock*, ſail then right with it, until that you get deeper water, or that the Steeple of *Middleburgh* come over the inner Sand-hill, and run then in along with it. *Weſtcapel* in *Flanders* is a ſhort flat little Steeple, with a little ſhort blunt ſpire, or cap upon it, but *Knock* is a ſharp Steeple not ſo high as *Heyſt*.

The Wieling *and* Inner-Wieling.

FOr to ſail in at the *Wieling* (coming out of the Sea) you muſt run on the Coaſt of *Flanders*, when you are paſt *Oſtend*, until you come in five fathom. Thwart of *Blankenburgh* there was wont a few years paſt to lie a bank, or ſhare off from the ſhore, which men might ſail within, coming from the Weſtwards: now there is nothing, but a little flat, and *Dobbeſand* is alſo altogether clean gone. Or elſe you muſt look out for *Liſwegen* a flat Steeple, and the thickeſt thereabouts. When

then

then the Steeples of *Bridges* (being called the *Bruggelingen*) ſtand a Cables length to the Weſtwards of *Liſwegen*, then you are yet to the Weſtwards of all the Sands, Polls and Banks; keep theſe Steeples ſo ſtanding and run on the Coaſt, until you come over the foreſaid *Ript*; and that you find again ſoft ground and more depth, until you come in five fathom, go then North-eaſt, and North-eaſt and by Eaſt with a flood, or North-eaſt, and North-eaſt and by North with an Ebb, reckon well your Tides, which runneth there moſt Eaſt South-eaſt ſomewhat ſoutherly, and Weſt North-weſt ſomewhat northerly, and the Tide runneth but a little hour along the land, and keep the Steeple of *Wenduynen* one or two ſhips length without the Sconce of *Blankenburgh*; ſo long as you can ſee them, and ſtill in five fathom, when that *Heyſt* cometh then to *Bridges*, and *Weſtcapel* to *Knock*, then you are right in the fair way of the *Wielingen*, the nearer that you are to the Bank of the *Engliſh Poll* the deeper water you ſhall find, except that you have the ſhoalding of the bank of it ſelf. *Bridges* muſt firſt come to *Heyſt*, or elſe you ſhould be ſo far Seawards, or too neer to the *Engliſh Poll*, with a fore-flood you may bring them both at once together, but not with a fore-ebb. If you get then ſhoalding that is of the *Engliſt Poll*, go from thence along the ſame courſe through, betwixt the *Engliſh Poll* and *French Poll*, or *Innerbank*, that is a hard Sand and ſteep, but the *Engliſh Poll* is thereabouts flat, which you may found. When the Caſtle of *Sluce* cometh to S. *Lambert* (a high flat Steeple upon *Caſand*, to the Northwards or to the Eaſtwards of *Sluce*) then you are paſt the *French Poll*, go then Eaſt on right with *Fluſhing*, or elſe obſerve theſe marks following: *Liſwegen* muſt not come within *Heyſt* before the Caſtle of *Sluce* come to the Eaſterly ſand-hill of *Caſand*, but remain without it, or elſe you ſhould ſail on againſt the Inner-bank, when as that the Caſtle cometh to the ſand-hill, go then boldly N.E. and by E. and E. N.E. for to avoid the *French Poll*, until that the Steeple of *Fluſhing* come to the Northwards of the Priſon Gate, then you get deeper water: go then on Eaſt, and E. and by South right with *Fluſhing*. There remaineth in the *Wieling*, as alſo in the *Inner-Wieling* at loweſt water, not leſs than 4 fathom and a half water.

Heyſt.

Caſtle of Sluce.

The

The *Inner-Wieling* lieth in through betwixt the *Inner-bank*, or *French Poll*, and *Caſand*. When you come from the weſtward into the *Wieling*, and are come ſo far that *Weſt-capel* come to *Knock*, and will go in at the *Inner-Wieling*, then you go from thence Eaſt and by South on, and you ſhall eſpy the buoy upon the point of the *Pardemark*, that is a ſand that ſhooteth off from the Eaſt point of *Sluce* Haven, and is very ſteep, leave that buoy on the Starboard ſide, and keep S *Lamberts* Steeple even without the ſoutherly Sand-hill of *Caſand*, or *Sluce* Haven, and go on North-eaſt, or ſomewhat more Northerly along by the ſhore, for to avoid the *Krakeſand*, when as then the Caſtle of *Sluce* and S. *Lamberts* Steeple come one in the other, then go on Eaſt right with *Vluſhing*. *Inner-Wieling.*

Flanders is a Land full of Sand hills and Hommocks, with many Steeples along the Coaſt, lying from the Haven of *Sluce* unto *Calice* moſt Weſt South-weſt and Eaſt North eaſt. The firſt Steeple to the Weſtwards of *Sluce* is S. *Anne* a flat Steeple, and then *Weſt-capel* a little ſhort flat ſteeple, with a blunt cap upon it. *Heyſt* to the weſtwards of them is a long ſharp Steeple higher than *Knock*. Betwixt *Heyſt* and *Blankenburgh* lieth *Liſwegen* ſomewhat within the Land; that is a flat Steeple, and the thickeſt of all Steeples thereabouts, *Blankenburgh* is alſo a flat Steeple higher than *Liſwegen*; but not thick. Within the Land from *Blankenburgh* ſtandeth *Bridges*, two thick ſharp Steeples upon one Church, to the Weſtwards of *Blankenburgh* a great half league lieth *Wendaynen* a ſharp Steeple. *Flanders.*

The Tides, Streams and Courſes of theſe Places.

BEfore *Brewers-Haven* a South South-weſt, and North North-eaſt Moon maketh high water.

In the Channel of *Brewers-Haven* a South and by W. Moon

At *Ter Veer* a South-eaſt and North-eaſt Moon.

In the *Veer-gate* a South and North Moon.

It is not good to run in at *Veer-gate*, eſpecially with a ſoutherly or ſouth-weſt wind, before that the flood be half ſpent, for the after-ebb and the fore-flood fall thwart over the *Baniard* hard in at the *Koom-pot*, towards the land of *Schowen*, but when the flood is half ſpent, then it falleth right in at the *Veer-gate*. When the Moon is South-eaſt or North-weſt, then is the water already two third parts flown.

Like as is here before ſaid of the *Maſe* and the *Gorees-gate*, ſo alſo here before the Channels of *Brewers-haven* and *Ter Veer* the flood turneth about with the Sun, ſo that the after-flood falleth in the Channels, and turneth then afterwards about to the ſouthwards, and becometh a running ebb, but the after-ebbs fall right out at the Channels, thwart into the Sea, and with the fore-flood again to the Northwards.

Before the *Wielings* a South and by Weſt, and a South South-weſt Moon maketh the higheſt water.

At *Fluſhing* and *Rammekens* a South South-weſt Moon.

At *Weſt-capel* on the land of *Walcheren*, a South and North Moon maketh high water. When the water is a half hour fallen, then the Tide beginneth to fall out there, and when it is flown a half hour, it beginneth to fall in: but before the *Botkill* it beginneth to go there firſt an hour before the loweſt water, but it falleth long at Sea. In the *Splete* and over the ſhoalds lying thereabouts, the Tide turneth about againſt the Sun, and at laſt falleth in at the Channels. A South and North Moon maketh there the higheſt water. The fore-flood falleth over the ſhoalds there towards the Land. When the Moon is about Eaſt South-eaſt, or that the water be about two hours flown, then it beginneth to turn towards the South, firſt South South-weſt, and then paſt the South towards the Eaſt, until that the Moon be South-South-eaſt, and then the flood falleth to the Eaſtwards. When *Hankenburgh* ſtandeth about ſ. e. and by e. from you, from thence to the Eaſtwards, the Tide turneth about againſt the Sun, but from thence to the weſtwards you ſhall not find the Tides to turn about.

Againſt *Zealand* in the fareway a third par of the flood falleth towards the Land afterwards Eaſt and by North. Men may ſee *Zealand* from the *Poop* in ſixteen fathom.

XVI. DEMON

XVI. Demonstration.

Wherein is ſhewed the South Sea, *and* Vlye Stream.

When you ſail from *Amſterdam* to the fall of *Urk*, keep the middle of the channel, in ſailing to *Tyoort* & from thence over *Pampus* with a Ship of a great draught, and keep *Marken* Church without the Land of *Uddam*, until the Steeple of *Zuyderwou* are paſt *Kinningerbuyrd*, being the houſes betwixt *Uddam* and *Durgerdam*, go then towards the land Eaſt until *Amſterdam* New Church is about *Durgerdam*, keep it ſo until the Church of *Weeſp* be come to the Caſtle of *Muyen*, and keep *Weeſp* ſo until *Udam* come without the Eaſt end of *Marken*. In this fareway it is a foot deeper, as if you ſail right through.

For to avoid the *Muyen* Sand, as *Monnikedam* is about the Weſt end of *Uddam*, and the Caſtle of *Muyen* betwixt *Weeſp* and *Muyen* Church, then men are thwart of *Muyen* Sand. For to ſail right over *Pampus*, keep the Steeple of *Diemen* over the point of *Tyoort*, ſo long as you can ſee *Tyoort*.

Being thwart of the Eaſt end of *Marken*, go on North-Eaſt to the fall of *Urck*, as you are a great mile off *Urck* you ſhall meet with a hard ſand, called the *Houtribbe*, lying South-eaſt and North-weſt thwart over the fareway, it is no more water, as upon the *Wiering* flat. When *Enchuſen* is North-weſt and North weſt and by Weſt from you, then men are upon the

The Houtribbe.

Houtribbe. Before men come againſt the ſand, men can by night ſee the fire upon *Urck*.

As *Urck* is more Northerly as North-eaſt from you, and men get ſhoalding, it is then the *Houtribbe*: coming from South, men are not about *Enchuſen* ſand, before *Urck* Church come without the houſes, it is ſo Eaſt and by South, and Eaſt South-eaſt from you, if men then go North-weſt and by Weſt men run cloſe along by the ſide of the ſand. With a ſhip of draught bring the Church through the houſes, until it ſtand Eaſt South-eaſt from you, go then on North-weſt and by weſt. Likewiſe coming from the North, bring *Urck* not more Eaſterly as Eaſt South-eaſt ſo you take no hurt of *Enchuſen* ſand.

Marks of Enchuſen Sand. From *Urck* to the Buoys upon the *Cripple* and *Hofſtede* the Courſe is North-weſt and by weſt run with this Courſe unto the ſouther buoy upon *Wieringen* flat: in turning to windwards, bring *Medenblik* a little within the *Ven*, but as *Medenblik* is without it, then men are right in the fareway.

Betwixt *Urck* and the buoy up the *Hofſtede* North-eaſt ſomewhat Eaſterly of the Steeple of *Enchuſen* lieth a Plate of a hard ſand, towards the end of *Enchuſen* ſand, and is not deeper as the *Frees* flat, about by Eaſt of it is the deepeſt water, but about by Weſt of it (by ſome called the *Kattegat*) you ſhall be ſooner about the high Horn, up *Enchuſen* ſand, and it it is good for Ships drawing but little water.

The Cripple The thwart marks of the buoys upon the *Cripple* and *Hofſtede*: are *Grotebrock* and *Hem* two ſharp Steeples right in the other, and *Warnis* a little Steeple in *Frieſland* to the South ſide of *Stavorne Cliffe*, ſo men have the length of the buoys, lying each of them in three fathom, the one on the Eaſt, and the other on the Weſt ſhore up the Tail of the *Cripple*. It is in the fareway twenty eight foot. Thwart of the *Creyl* in ſailing out, or about the *Creyl*, in ſailing in, a little within the *Creyl* on the North ſhore, is along the reach, towards the buoy up the *Hofſtede* a hard ſand, the South *Creyl*, up which is no more than two fathom by low water; betwixt them and the North ſhore is depth of three fathom and ſoft ground, and by South or Weſt of it four fathom. As *Mirnes* a little flat Steeple in *Frieſland* cometh

eth over a Country houſe by South by the *Cliffe*, ſo are you thwart of the plate.

The marks of the buoy up *Creyl* are the Steeple of *Twiſh* over the Corn Mill by weſt of *Medenblik*, and the Steeple of *Mirnes*. From the buoy up *Creyl* to the buoy upon the *Frees* Plate is the Courſe North and by Eaſt. As the Steeple of *Twiſh* cometh a little by North of *Medenblik* keep them ſo long as you can ſee it, and you ſhall not fail within any ſhoalds *The Creil*

Betwixt the Buoy upon the *Creyl* and the *Frees* Plate on the Weſt ſhore along the Reach is the *Monik* ſand, which men can be foul of, if they run too far over by weſt. Being about the *Creyl*, go on North and by Eaſt with a ſhip drawing but little water over the Tail of *Broad* ſand, right to the buoy up the Sand, called *Weſtworcum*, but keep the fareway with other ſhips. For to find the deepeſt water up the flat, bring *Pandragen* a flat Steeple by weſt of *Worcum*, and ſail ſo right with it, it is a long mark of the buoy up the *Frees* Plate, and you run right with the buoy; as *Wans* and *Mirnes* come in the other, men have ſo the lengh of the buoy lying on the weſt ſide of the Plate, run by weſt along of it, for the deepeſt water, coming from the North men can ſail within the *Frees* Plate. *Monik-ſand.*

As men are paſt the buoy up the Plate, go on North North-eaſt until *Pandragen* come between the little Village and *Voorvolde*. If men have ſo the *Cliff* through *Stavrne*, men have ſo the deepeſt water up the ſhoaldeſt of flat.

Mirnes, *Molqueren*, *Hemelam* and a little Village, ſtanding in four parts are the old thwart marks of the buoy in the *Bight*. Betwixt the buoys upon the *Frees* Plate and in the *Bight* is the ſhoaldeſt of the flat. As the buoy in the *Bight* is on your broad ſide, ſo go on North and by weſt ſomewhat weſterly unto the buoy of *Weſtworcum*, lying on the Eaſt ſhore in ſixteen foot at low water, upon theſe marks, a little ſharp Steeple called *Harich* cometh over a little Village by North of *Hialopen*, called *Oertwiſch*, the right deep thwart of it is three fathom. From thence to the buoy upon *Ygelhoeck* the Courſe is North, the marks thereof are a little ſharp Steeple with the firſt long Village by North of *Weſtworcum*, called *Geeſt*, as the little Steeple *The Flat.*

Steeple is in the innermoſt ſwamp of the long Village, ſo have men the buoy, being a good thwart mark, the longeſt marks are the ſharp Steeple of *Pingom* over the flat Steeple of *Cornwird* up the water ſide, and *Pandragen* to a little houſe by North of the Village with a ſwamp.

Feom *Ygelhoeck* to the *Middleground* the Courſe is North, the right deep in the *Middleground* is ſeven fathom, in the fareway betwixt *Weſtwoud* and *Ygelhoeck* it is four fathom, the Eaſt is flat, and the Weſt ſhore is ſteep. The Buoy of *Middleground* lieth up theſe marks, the two ſharp Steeples of *Arum* and *Pingom* in the other North-eaſt from you, and the long marks are, as *Kimſwart*, being the runner, cometh behind the Church of *Surick*, ſo are you right in the fareway. The Church of *Surick* ſtandeth upon the water ſide, upon a point lying out North-eaſt and by North from the buoy, then you are right in the *Middleground*, on which ſide *Wynaem* is neareſt, that ſhore you are alſo neareſt; the Weſt ſhore is ſteep, the Eaſt ſhore indifferent flat, men can run over it in three fathom. From *Middleground* outwards to the *Flye* men can ſail within no Tailes or ſands on the Weſt ſhore.

Middleground.

Being paſt the buoy in the *Middleground*, ſo go on North North-weſt unto the buoy upon *Swanebalgh*, which lieth in three fathom on the Eaſt ſhore, and the thwart marks thereof are *Bolſwart* over a little ſhort Houſe by South of *Cornward*. As men run over betwixt the buoys of the *Middleground*, and *Swanebalgh* on the Eaſt ſhore more Eaſterly as in three fathom, men might in ſailing out, ſail behind the ſhoalds of *Swanebalgh*, on the Weſt ſhore it is good ground for to ankor in.

From the Buoy upon *Swan balgh* to the Buoy upon *Schuytesand*, the Courſe is North-weſt the thwart marks thereof are *Wynaem* over the higeſt part of *Harlingen*, and the long marks, *Bolſwart* by North of the *Huys*, lying by North of *Wuns*, this buoy lieth in ſix fathom on the Eaſt ſhore upon a Tail, which men might ſail within, as men ſail out, the right deep thwart of it is ſeven fathom, the Weſt ſhore is indifferent flat, the Eaſt ſhore is ſteep, but a little without the buoy it is flat all along to *Keeſhoeck*, and men can ſound it all along unto the *Sloot*. In

Schuytesand.

ſailing

ſailing up, men might ſail within the weſt ſhore over againſt *Schuyteſand*, or in *Deadbalgh*, behind a Tail of Sand called the point of the *Waert*, but keeping in four fathm from that ſhore men take no hurt. In ſailing up with a fore-flood, keep the Eaſt ſhore, elſe men are lightly carried into the foreſaid Balge behind *Waert* before you ſhould be aware of it. Upon the point of the *Waert* ſtandeth a Drift beacon, and two to the Northwards or Weſtwards of it, which are called the beakons of *Claescomen*, by South of it is a beacon upon *Meynſen* Plate. The marks for to ſail along this long reach are, *Mackum* with a mill upon the water ſide, and a Village with a little flat Steeple by South from *Mackum*, as *Pandragen* is betwixt *Mackum* and the Village, then you go clear off the Tail or *Deadbalgh*: if *Pandragen* come neareſt to *Idſegahuiſen*, then you are too near the Tail, or if *Pandragen* cometh neareſt to *Mackum*, then are men too near the Eaſt ſhore.

From *Schuyt-ſand* to the buoy up *Keeſhoeck* is it Weſt North-weſt. In that long reach go little more than half tides along the deep, the after-flood and fore-ebb fall thwart over there on Weſt, and the after-ebb and fore-flood contrary on Eaſt. The marks of the buoy upon *Keeſhoeck* are *Franiker* Steeple betwixt the Mill and the Town of *Harlingen*. *Keeſhoeck.*

Betwixt *Keeſhoeck* and *Seehuyteſand* lies a narrow plate along the reach, moſt in the fareway neareſt the weſt ſhore, whereupon is four fathom, running to windwards you are over it with two caſts of the lead.

Weſtwards from the buoy upon *Keeſhoeck* is the old *Vlye*, it lieth in firſt South South-weſt, and forth to the buoy upon the *Aeſſe* in the *Teſſel* Stream. The after-flood with the fore-ebb fall very ſtrong in it. In ſailing upwards men can ſail within it in four fathom. The marks thereof are the Steeple of *Franiker* to the ſouthwards of the Steeple of *Harlingen*, from thence outwards off unto *Schiering-ſhals* the Weſt ſhore is ſteep, in eight fathom men are by it, the fareway betwixt the buoys is ten fathom. *The old Vly.*

From *Keeſhhoeck* to *Wolfshoeck* is the Courſe firſt North-weſt, and North weſt and by North to the buoy betwixt them both, *Wolfshoeck.*

both, by the Pilots called the Buoy upon the *Elbow*, and from thence to the Buoy upon *Woolfshoeck* North, or ſomewhat Eaſterly, which lyeth in four fathom on the Eaſt ſhore.

From the Buoy upon *Woolfshoeck* to the buoy of *Schiering-ſhals*, is the Courſe North North-weſt, and North-weſt and by North. To the Northwards or Eaſtwards of it goeth up a broad Bight South-eaſt far into the grounds, ſo deep as the fareway called the *Inſlot*, coming in men ſail within ſeven fathom, the fore-flood falleth from *Schiering-ſhal* into it, and the fore-ebb very ſtrong out of it upon the Tail of *Schiering-ſhals*, whereby many ſhips are miſcarried.

Schiering ſhals is a Tail Sand ſhooting off from the Weſt ſhore, upon it lieth a white buoy in four fathom, coming in from without, fail within it in ſix fathom, the right deep betwixt *Woolfshoeck* and *Schiering-ſhals* is nine fathom.

Longſand. From *Schiering ſhals* to *Longſand* the Courſe is North-weſt and North-weſt and by North, betwixt them both on the Weſt ſhore it is the beſt road of the *Flye* ſtream, there is alſo a little tide. The right deep is eight, nine and ten fathom. *Longſand* men may ſail within it on the Eaſt ſhore, in ſailing up, but if men keep themſelves in ſeven or eight fathom they ſhall not come too near neither of *Longſand* nor *Schiering-ſhals*. From *Longſand* to the *Sloot* the Courſe is forth North North-weſt the right deep is ten fathom, you run along by the beacon upon *Crakeſand* until you come in the *Sloot*.

The Iſland *Flyeland* is three Leages long, and a Land very eaſie to be known: upon the Eaſt end lye high white ſand-hills, and to the weſtwards it is a Land full of ſhort low Homocks and Knobs. Upon the Weſt end there is a Church with a mill to the Eaſtwards of it. From thence ſhooteth off a Riff a good way into the Sea. To the weſtwards of this Riff betwixt *Flyeland* and *Eyerland* goeth in a deep, called the *Weſter-gate*, or *Weſtfield-deep*, it is not for great ſhips, but only for Fiſher boats; there is eight or ten foot water. Upon the Eaſt end there is a Mill and a Cape, which are the marks for to avoid the ground lying before the *Flye*.

The Schelling. To the Eaſtward's of *Flyland* lieth the *Schellingh*, being about theer

three leagues long, upon it are four Churches, the weſtermoſt is a high flat Steeple, called *Brandaris*. About the middle of the Iſland are two Steeples, the weſtermoſt is the flat called *Zeerip*, the eaſtermoſt is ſharp, called *Midlands*. To the eaſtwards ſtands yet a high ſharp Steeple called the *Hoorn*, and a Chappel called St. *Johns*. Upon the Eaſt end lie high white ſand-hills, and upon the Weſt end lyeth but one, called the *Lit*. Betwixt *Midland* and the *Lit* it is low Knubby land. Upon the Weſt end ſtandeth a Cape with a fire-beacon, which is fired by night.

For to ſail in *Stortemelk*, being the Land-deep of *Flyland*, ſo bring the Cape upon the Eaſt end of *Flyland* and the Mill in each other, it is then from you South-eaſt and by Eaſt, ſail right in with them, and ſo you fall right with the outermoſt buoy, lying in five fathom upon the outermoſt point of the long bank, which bank is on the North ſide indifferent flat, ſo that coming from the North men may run by it up the lead in five fathom, and ſo alſo find the outermoſt buoy. Men may alſo for need run along by the Eaſt of the outermoſt buoy over the end of the long bank within three fathom of the ſhore, but not to the Eaſtwards of the ſecond buoy; but a good way to the Eaſtwards of it, lying even to the Southwards of the point of another narrow tail of ſand, upon which thwart of the buoy is but eleven foot water, betwixt that tail and the long bank runneth a Creek, to the Eaſtwards into the grounds, of five fathom depth. *The Land-deep of Flyland.*

It happeneth ſometimes that the ſhips that come over the end of the long bank, and finding again deeper water; think they are in the right deep of *Stortemelk*, and luff upwards into it, but they run in the foreſaid ſhore, or Creek, betwixt the two Tails of Sand, and is not without a great danger with a weſterly wind, where they muſt go backwards again out. Coming from the weſtwards along by the Iſland *Flyland* in four or five fathom, you ſhall not alſo fail to run in ſight of the foreſaid outermoſt buoy. He which falleth about the Deep of *Stortemelk* by night, let him bring the fire-beacon South-eaſt and by Eaſt from him, and run ſo right into it, until that he come by the

ſhore, and he ſhall run along to to the weſtwards off the outermoſt buoy.

Stortemelk In *Stortemelk* lie ſeven black buoys and one white, leave the black buoys on the Larboard and the white on the ſtarboard ſide. The ſecond buoy called the *Droge dry*, lieth in eleven foot up the ſhoaldeſt of the Channel, by South of it is alſo no more than eleven foot, but a little within it is ſixteen foot. The third is called the innermoſt *Droge dry*, lying in ſixteen foot, the right deep betwixt them both is three fathom. The fourth called *Kyekbeeck*, betwixt this and the the third it is in the fareway five fathom: over againſt the fourth is the white buoy at the Strand: thwart of it runneth off a little Tail from the ſhore, which men might in ſailing out ſail within it. Unto this white buoy, or unto the fourth buoy from without it lieth in Eaſt North-eaſt, from the fourth to the fifth Eaſt, and more Southerly. The fifth buoy is called the outermoſt point buoy, and the ſeventh or laſt the innermoſt. Betwixt the outermoſt and the middlemoſt point buoy, neareſt to the outermoſt, runneth a Tail of Sand from the ſhore; where men can ſail within, in coming in, growing out ſometimes as far as the buoy, and then the Deep breaketh through again by the Wall and ſcoures the Taile altogether to the North ſhore. From the innermoſt buoy men muſt run along by the Strand of *Flyland*, or on South the buoy upon the Plate.

Eaſter Booms Gate.

FOr to ſail in at *Booms-gate* coming out of the Sea, or from Weſt, bring the Cape up the *Schelling* and the Steeple of *Brandaris* one in the other, ſtanding ſo South South-eaſt and South-eaſt and by South, run right in with them you find ſo the outermoſt buoy without the channel in the Sea in eleven fathom, a little without, and to the Eaſt of the outermoſt point of the ſteep grounds, being without upon the Northſide ſo ſteep, that men are in twelve fathom very cloſe to them, whereupon it is no more than five foot. Cloſe by Eaſt of the Cape is a fire bea-

con

con, and upon it is fire every night, as upon *Brandaris*. If by night men bring the fires one in the other, or the beacon-fire Weſt and by North, and Weſt North-weſt off the fire of *Brandaris*, ſail ſo right with them until you come againſt the ſouth ſhore, then you ſhall run cloſe along by the outermoſt buoy, as the fire upon *Fly-land* is off South South-weſt, or a little weſterly, ſo are you thwart of the outermoſt buoy. *Brandaris*

The foreflood falleth Eaſt North-eaſt thwart over this Channel moſt until half flood before it goeth right in, and the fore-ebb alſo thwart over the Channel moſt until half ebb before it ſet right out, therefore it is beſt with a North-eaſt or Eaſterly Wind and fore ebb to ſeek to the ſhore ſomewhat to the Eaſtward of the Cape and Steeple, run by it in five fathom, being clean and flat until within the Cape and Steeple.

The ſecond buoy lyeth in four fathom, within the outermoſt point of the ſteep grounds, lying from the firſt point about South and by Weſt. Betwixt theſe two firſt buoys it is twenty foot deep up the ſhoaldieſt of the Channel, thwart of the foreſaid point of the ſteep grounds, being at the end ſo ſteep, that it is by them eighteen foot, the Eaſt ſide is flat riſing ground, and ſhoaldeth from eighteen to fourteen and twelve foot. By Eaſt of the ſecond buoy is the fair-way three fathom, and by Weſt of it is five fathom, but not far, therefore you may not run far along by the Weſt of it. With a fore ebb men ſhould be ſoon on againſt the ſteep grounds, being on the inner ſide alſo ſteep. Men can ſail by the lead about the Eaſt ſhore, but a Storm breaketh the Sea very much up it until the ſecond buoy. The ſecond and third lye South-weſt and by S. one from another, the fourth and fifth lye South-weſt and by Weſt from the third, the third lies in five fathom on the Eaſt ſhore, where men can ſail about Eaſtwards, the ſhore is there plain and even, and the fair-way on the Weſt ſide. The fifth is the buoy upon *Feyhorck*, which lieth alſo on the Eaſt ſhore in five fathom, but nearer than the third, men can ſail along by Eaſt of it, the deep by Weſt is nine fathom.

Until paſt the buoy men can ſail in from without upon the lead by the Eaſt ſhore, and alſo by night, but inwards it is wide

and broad. From *Feyhoeck* you ſail unto the *Robbegat*, on the North ſide of them up the point of the Plate is a Beacon in the
Robbegat. midſt of the *Robbegat*, next to the Plate is a ſmall ſhoald, upon it is a buoy, in coming in betwixt this buoy and the beacon is the deepeſt water, but men muſt go in along by the beacon for not to be abuſed with the ſtream, falling thwart over the Plate, it is betwixt the ſmall ſhoald and the Rozyne Plate wider, and the Courſe of the *Robbegat* is South-weſt and South-weſt and by Weſt. Being paſt the *Robbegat* ſo goeth the ſtrand of *Flye-land* along by it.

Weſter Booms Gate.

FOr to ſail in the Weſter *Booms-gate* coming in from the Weſt, ſo bring the Head and Tower of *Brandaris* one in the other, it will be Eaſt and by South from you, running ſo in, you ſhall find the outermoſt buoy, there is ſix fathom, keep the Cape or Head ſo ſtanding until you come to the ſecond, then bring the Tower a great handſpike to the South of the Cape, and ſail in with it, ſo doing you ſhall ſail between a black and a white buoy, where it is ſeventeen foot by low water, from thence you ſhall come to ſix fathom, and ſo come in right at *Booms* Channel.

The Inting For to ſail into *Jetting* coming through the *Robbegat*, about the Rozyne plate, men muſt go to the buoy upon Longſand, and ſo betwixt the white and black buoys, leaving the black buoys in ſailing in on the larboard, and thewhite on the ſtar-board ſide, until men come againſt the beacons upon the *Nakens*, you can then commonly ſee from the one buoy to the other, ſail then along by the beacons upon the *Nakens* Eaſt South-eaſt, on until *Brandaris* come cloſe by *Grind*, but not to it, keep it ſo ſtanding and run on South, you ſail ſo right upon the Tail of *Hendrik Tjaders* Plate, where you might ſail within on the Eaſt ſide, leaving the ſame on the larboard ſide you run along to the weſtwards of it South South-eaſt unto the laſt buoy, lying upon the ſouth point of *Hendrik Tjaders* Plate. Over againſt

the

the beacons up the *Nakens* lye on the South ſide two white buoys, the Eaſtermoſt upon a Tail of Sand, which men might ſail within in ſailing off; to the Southwards of it, betwixt the two laſt black buoys by the Weſt ſide is the Road, where the Ships do anchor for to light; being bound to *Harlinge*.

Note. All the depths before rehearſed, as well of *Stortemelk* as of the *Booms* Channels, are ſaid of the loweſt water, at half flood it is three foot deeper, it floweth upon theſe places with a common Tide ſix foot. The Numbers of the depths down in the *Carde* of the *Flye*, and *Amelands Gate* are to be underſtood of feet. As for Example; By the firſt buoy of the *Eaſter Booms Gate* ſtand forty two, that are forty two foot, or ſeven fathom, ſix foot being reckoned for a fathom.

Of the Depths and Grounds about theſe Places.

THe Iſlands *Flyeland* and the *Schelling* men may ſee in ſixteen fathom. Thwart of the *Schelling* the Ground is white Sand.

The ſteep Grounds or *Peterſand* and *Bornriffe* are very ſteep on the off ſide, cloſe by them it is twelve fathom deep.

The Tides and Streams of theſe Places.

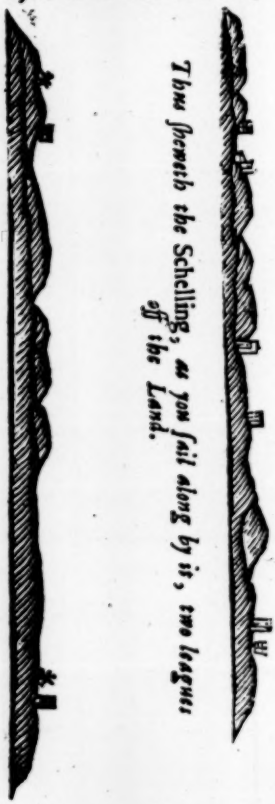
AT *Amſterdam* a North-eaſt and South-weſt Moon maketh high water.

At *Horne*, *Enchuſen* and *Urk* a North and South Moon.

Betixt the *Cripple-ſand* and the *Creyl* a N. and by W. and S. and be E. Moon. Upon the *Freeſe* and *Wieringer* flat a N.W. and S.E. Moon.

In

In the *Flye* a S. E. and N.W. Moon maketh high water. Before the *Flye* the Flood falleth to the Eaſtwards thwart over the grounds almoſt until half flood before it ſetteth into *Boomkens* Gate. Likewiſe the Ebb falleth to the Weſtwards thwart over the Grounds, almoſt until half ebb, before it ſetteth right out at the Channel. The after flood turneth about with the fore ebb, and falleth along *Flyeland* out at *Stortemelk*.



How theſe Lands do ſhew themſelves at Sea.

Thus ſheweth the Schelling, *as you ſail along by it, two leagues off the Land.*

Flyeland *ſheweth thus when you are ſailing off from it two leagues.*

XVII. Demonstration.

The Ameland Gate, Scholbalgh, *the* Eaſter *and* Weſter Eemſes, *unto the Iſland* Baltrum.

TWo Leagues to the Eaſtward of the *Schelling* lyeth *Ameland*, lying Eaſt North eaſt and Weſt South-Weſt four great Leagues. Upon the Weſt end of *Ameland* ſtandeth a Cape and a thick great flat Steeple, called *Holme*; the roof of the Church is broken off, but the after front with the roof is above the ſide walls; by Eaſt of them is a Mill with a houſe by Weſt of it. About the place where *Midlands* Church was wont to ſtand, lye four white ſand-hills, being low, flat, and long, towards the Eaſt end it is knobby Land with white amongſt it. From the Weſt end of *Ameland* runneth off a Riff three leagues in Sea, called *Born-riff*, being on the outer ſide very ſteep, come no nearer than in twelve fathom, coming from Eaſt men cannot ſail within it, but ſailing by it in ſeven fathom, you run not a bowles caſt without it.

For to ſail in *Ameland*-Gate out of the Sea, bring the Cape upon the Eaſt end of the *Schelling* over the Steeple of the *Horne*, and ſail in with them, until the Cape upon *Ameland*, and the *Holme* *Ameland.* *Horne-gate.*

Holme Steeple are in another, leave ſo the firſt marks, and ſail in upon the ſecond, you find the outermoſt buoy, lying within the outermoſt point of *Born-riff*. From Weſtwards run by the Strand of *Schelling* in five fathom, you ſail ſo upon the outermoſt buoy, the Cape and Steeple up *Ameland* come then in each other. Coming by the *Schelling* in four fathom, you ſail not in the *Koggedeep* grounds, thwart of it is the firſt buoy on the South ſide of *Born-riff*, run by South of it keeping the Steeple and Cape in one another, until you are paſt the ſecond buoy.

Being paſt the ſecond buoy bring the Steeple by North of the Cape, go then E. North-eaſt to the third buoy up *Gerritshonden*, on it lye two white buoys, the firſt over the four black buoys, leave all the black on larboord, and the white on the ſtarboord ſide, you may then run up the lead by North of the Plate, but be careful of a fore-ebb, falling ſtrong over it N. North-weſt into Sea over *Born-riff*. Betwixt the ſecond and the third buoy in the fareway it is nine, by the third and the Plate ſeven fathom. Being paſt the four buoys both ſides are ſteep, and the fareway nine fathom, go ſo in South South-eaſt until the Steeple of *Holme* cometh over the South point of *Ameland*, and ſo you come in the *Bight*, anchor there on the South ſide which is flat in ſix fathom.

For to ſail further in the *Horſen*, go from the *Bight* Eaſt North-eaſt, by the South ſide in five fathom until *Heynooms chamber*, being a red tyled houſe, bome a little by North of *Holme*, anchor there in ſix fathom, men lye there ſheltred from all winds, it being there twelve fathom deep, and the North ſide is very ſteep. The foreſaid depth (like as alſo of the *Flye*) are all ſaid to be the Tides of low water.

Schiermonk-oog.

Schiermonk oog. *Schiermonk-oog* is from the Eaſterly end of *Ameland* Eaſt ſomewhat Northerly three leagues, being a low plain Iſland, and about two leagues long, at the Weſt end are two Capes

Capes and a white ſandhill, otherwiſe it is all with low blackiſh ſandhills, and mingled with white, the Eaſt end is a long flat ſtrand, with little low rough ſandhills. As men bring the two Capes one in the other, and run ſo in, men find ſo the outermoſt buoy lying without at Sea in ſeven fathom, leave the buoys in the Channel on the ſtarboard ſide, and run along the Eaſtwards of them, being within the Channel men find alſo beacons on the Weſt ſhore, follow them all along, until you are come to *Oſtmahorn*, where men can anchor. The Depths of that Channel do ſhift oftentimes, ſo that there is no certainty to be deſcribed of it.

Four leagues to the Eaſtwards of *Schiermonk-oog* lieth the Iſland *Rottum*, and betwixt them the little Iſland *Boſch*. Betwixt the *Boſch* and *Schiermonk-oog* was a Channel called the *Lawers*, but is now moſt caſt. *Borkum.*

To the Eaſtwards of the *Boſch* goeth in the *Schille*, which is ſometimes deep and ſometimes ſhoald.

The Iſland *Rottum* is a little Iſland two leagues long, and eaſie to be known, the Weſt end is high and ſteep, the reſt is low land, upon the Eaſt end ſtand to Capes, the greateſt is upon the flat ſtrand, the ſmalleſt on the South ſide of the Sandhill, there ſtandeth alſo two houſes upon it.

Borckum is alſo an Iſland eaſy to be known, two great leagues long, it riſeth in three parts coming out of Sea, from Weſtwards in four parts, for which h gh floods the water runneth through in three parts. The Worthy Counſel of *Embden* hath cauſed to be ſet upon the Weſt end a high thick Steeple, you can ſee it far off in Sea, on the Weſt ſide thereof is a low Church. *Rottum.*

From the Weſt end of *Borckum* ſhooteth off a Riff a great way in Sea, called *Borckum* Riff. To the Southwards of it betwixt *Borckum* and *Rottum* goeth in the *Weſter-Ems*, being the beſt Channel of this Coaſt.

The VVeſter Eems.

FOr to ſail into the *Weſter Eems*, you muſt bring the Capes upon *Rottum* one in the other, which ſhall ſtand about Eaſt South-eaſt from you, ſail in out of the Sea right with them, and you find the outermoſt buoy in five fathom.

Or elſe if you come from Weſtwards, running along the ſhore in ſeven fathom, you run ſo in ſight of the aforeſaid buoy, then the Steeple of *Borkum* ſhall ſtand Eaſt and more Southerly, and the Weſt end of *Rottum* South-eaſt and by South from you. Towards the Land from the ſecond buoy is a Plate, lying called *Geltſacks* Plate, lying almoſt along the reach unto the fourth buoy, whereupon is 15 foot at low water.

From the firſt buoy to the ſecond, third and fourth the Courſe is along Eaſt, the ſecond buoy lieth in five, and the third in four fathom and a half, that is upon the ſhoaldeſt of the *Weſter Eems*. The fourth buoy lieth alſo in four fathom and a half upon the point of the Plate. All theſe buoys men leave on the ſtarboord ſide in ſailing in

The Riff of *Borkum* is on the off-ſide and upon the end flat, as the Capes upon *Rottum* ſtand South-eaſt from you, ſo you can ſail along over the Riff right unto the fourth buoy, upon the Tail of the Riff is at low water ſixteen foot, for it is flat and broad, on the inner ſide it is very ſteep, there is ſhooting off alſo from the inner ſide a Tail of Sand, which men might ſail at unawares within in ſailing up.

From the fourth buoy in the Bight of *Rottum* the Courſe is Eaſt South-eaſt, from this buoy to the buoy upon *Huybers* Plate the Courſe is Eaſt and by South, and from this buoy unto *Steven Johnſons* buoy the Courſe is South-eaſt, lying betwixt *Bagbeacon*, and the *Ruyt-beacon* in ſeven fathom and a half. Betwixt theſe two buoys is the *Eems* twelve fathom deep. Coming paſt the buoy upon *Huybers* Plate, you muſt edge ſomewhat off from *Borckum*, for to avoid the *Mieuwe* Tail, ſhooting off from the South end of *Borckum*, which you might ſail upon Weſtwards

Mieuwes Tail.

in five fathom, as you are bound inwards.

Weſtwards from *Steven Johnſons* buoy is the *Wad-beacon*, right to the Southwards of it goeth in the *Wad*. On the other ſide over againſt the foreſaid buoy lyeth the *Ranſel*, being a Tail and ſhooting off from the North ſhore, which men might ſail within in five fathom, in ſailing upwards. The marks of this reach, and for to avoid the *Ranſel* are theſe: Upon the South end of *Borckum* lie two little Sand-hills, called the *Wolden*, keep the Steeple of *Borckum* to the Weſt ſide of theſe Sand-hills, or by Weſt of them, and ſo you go clear off the *Ranſel*, it is in that reach eight fathom deep.

From *Steven Johnſons* buoy to *Doeck* buoy the Courſe is Eaſt South-eaſt, betwixt theſe two buoys ſtandeth a Beacon on the South ſhore, called the *Ruyt* beacon, by this buoy the *Ems* is in the fair way about ſeven fathom deep, this buoy lieth on the South ſhore in five fathom, upon a Tail, which men might unawares ſail within in ſailing up, the Flood falleth very ſtrong behind this buoy in *Doeck* gate. The marks of *Doeck* buoy are, as the Cloiſter of the Dam, being a flat Church, cometh by Weſt *Oudcloiſter*, ſo as one can even ſee through betwixt them, ſou have the length of this buoy, and then ſo ſtand theſe marks South from you. From *Doeck* buoy to the laſt buoy the Courſe is along Eaſt South-eaſt, being paſt, men ſhall eſpy the Beacons on the Weſt ſhore, ſail along about by them. The marks of *Eemſhorn*, are a mill in *Emderland* about Eaſt and by North from you, and a high houſe to the Northwards of the Church, as the Mill ſtandeth betwixt that houſe and the Church, then you have the length of *Eemſhorn*. About *Eemſhorn* ſtand two or four beacons, which lead you even unto *Groeningerland*. Being paſt *Doeck* buoy, then you can ſound by the Weſt ſhore until you come to *Otterdum* in ſix fathom, come no near to it, for it is very ſteep; the Eaſt ſhore in ſailing in men ſail within it in ſix fathom, behind a Plate called the *Hond*, being a hard ſand, further in is alſo another Plate called the *Pope*, and are faſt to each other, the Weſt ſhore is clay ground to *Otterdum*; keep all the Weſt ſhore.

Steven Johnſons buoy.

For to avoid *Reyder* ſand, being a Plate in the midſt of the *Reyder ſand.*

Eems, by low water is hereupon ten foot. Look out for *Oſterdum* a flat Church without a Steeple on the dyke, coming thwart of it, edge over to *Embderland*, to wit, to the *Knock*, being a flat Steeple in the water ſtanding upon the point, coming by the *Knock*, run then within two Cables length by the North ſhore unto *Loegerhorn*, ſo ſail you not too near the Plate. Betwixt the *Knock* and *Loegerhorn* is a flat Steeple called *Gerridſwaerd*, as men ſee through the Steeple, ſo are you by the foreſaid Plate.

The Eaſter Eems.

FOr to ſail in the *Eaſter Eems*, bring the Church of *Borckum* South of you, if it be then clear ſight, you are able to ſee through the Steeple, ſail ſo right in with it, you find the outermoſt buoy in four fathom by low water.

From this buoy to the ſecond it is Eaſt and by South. The end of *Juyſt* Riff betwixt theſe two buoys is on the inner ſide ſo exceeding ſteep, that men cannot ſound it, further in from the ſecond buoy it is flatter, here men may ſound, the buoy lieth in three fathom by low water upon a point of a narrow long bank, ſhooting off from the Eaſt end of *Borckum* where men can ſail within, called *Brewers* Plate, which Tail is by North very ſteep, betwixt the firſt and ſecond buoy it is four fathom deep at low Tide.

From the ſecond buoy the *Eaſter Eems* lieth in Eaſt and by South, and Eaſt S. E. and by little more Southerly, with a Flood men muſt go on from the ſecond buoy at leaſt Eaſt and Eaſt and by North, not for to be carried within the foreſaid point of *Brewers* Plate. *Juyſt* riff is inwards from the ſecond buoy flat, you can ſound it in ſix fathom, and come not nearer it, leaſt you ſail within *Memerſand*, being a Tail and ſhooting off from the foot ſtrand within *Juyſt* from *Memerſand*, as ſoon as you get deeper water, ſo run firſt Eaſt South-eaſt, and afterwards on South-eaſt to the beacon up *High-horn* ſtanding upon the dry ſand on ſtarboord ſide, and edge up to the Southwards or Weſtward

Memerſand.

wards behind the beacon, there is road in ſix fathom, and good for ſoutherly winds.

The *Eaſter Ems* is thwart of it wide and broad, the Eaſt end of *Borcum* is flat, you muſt not ſpare the lead in ſailing out or in. About South-eaſt and South-eaſt and by Eaſt from the foreſaid beacon lieth the buoy upon *Kings* Plate, being a Tail ſhooting off from the South ſhore, this buoy with the beacon men leave on the ſtarboard ſide, betwixt them both is good road on the South ſhore. At *Norden* in *Eaſt Frieſland* ſtand two Steeples, cloſe by each other, the one is flat and thick, and the other long and ſmall, as theſe Steeples come a ſhips length to the Eaſtwards of the Eaſtermoſt ſide of the *Band*, being a little Iſland upon the *Wad*, ſo have you the buoy upon *Kings* Plate, which are good long marks and when the Steeple of *Juyſt* cometh to be North North eaſt from you, they are good thwart marks of the buoy.

From the buoy upon *Kings* Plate to the buoy upon *Hambourgh* ſand the Courſe is South-eaſt, and South-eaſt and by Eaſt it lieth in three fathom, this is Pilots water for great ſhips. Men can run from thence through a Creek and come out againſt the Southermoſt buoy up the *Weſter Ems*. *buoy upon Kings Plate.*

For to ſail through this Creek, you muſt leave the buoy upon *Hambourgh* ſand on the larboard ſide, and ſail along by the beacons, and leaving them on the ſtarboard ſide, at both the ends of this Creek it is three fathom deep, and in the midſt ſix fathom, and lieth about South South-weſt through along in the *Weſter Ems*.

About a half league within *Juyſt* betwixt the beacon upon the *High-horn* and the buoy upon *Kings* Plate on the Eaſt ſide of the *Eaſter Ems* lieth *Memerbalgh*. It lieth in moſt North, and here is a good road for ſmall ſhips that are bound to the Weſtwards, or out into Sea. Within the *Balgh* he that runneth in by the *High-Horn* ſhall find good road for ſmall ſhips that are bound to the Eaſtwards, and which is lying alſo in the South.

When you ſhall come from the Eaſtwards, you may ſound *Juyſt* Riff which is flat on the off ſide, without in the point of the

Riff.

Riff is a ſhore or a dead Balgh, with two points, and betwixt them it is three fathom and a half deep.

Note. When you will ſail upwards the *Weſter Eems*, you muſt leave all the buoys on the ſtarboard ſide.

Juyſt. The Iſland *Juyſt* lieth a great league, or a league and a half, Eaſt North-eaſt from *Borckum* aſunder, and the ſame is a little and low Iſland, the Weſt end whereof is higher and ſteeper than the the midſt of this Iſland. The Church ſtandeth in the midſt upon the land, and the Steeple is ſomewhat ſharp, and ſtandeth at the Eaſt end of the Church, and men cannot ſee the Church as but only thwart of the place of the valley. Betwixt *Borckum* and *Juyſt* goeth in the *Eaſter Eems*.

From the Weſt end of *Juyſt* lieth off a Riff two leagues, or two leagues and a half Weſt into the Sea on the outermoſt ſide men may ſound it in three or four fathom, to the Southwards of it goeth then in the *Eaſter Eems*.

A South-eaſt and North-weſt Moon maketh without the *Eemſes* the higheſt water.

To the Eaſt of *Juyſt* lieth *Buys*, the ſhorteſt of all the Iſlands of this Coaſt, riſing up in two Hoomocks, the Eaſterlweſt is the higheſt and ſharpeſt.

Betwixt *Juyſt* and *Buys* goeth in the the *Buyſ-deep*, the Counſell of *Embden* was wont to ſet it with buoys, but no more, for it is ſhift ſo oftentimes.

Norderny. *Norderney* lieth two leagues to the Eaſtwards of *Juyſt*, betwixt them both is the little Iſland *Buys*. *Norderny* is to be known by a broad flat Tower, ſtanding upon the Weſt end, but ſometimes men can hardly perceive it. About the midſt of the Iſland is a high white ſand-hill, thereby it is beſt to be known. Betwixt *Norderny* and *Buys* goeth in the Channel *Norder-deep*.

Baltrum. A great league to the Eaſtwards of *Norderny* lyeth the Iſland *Baltrum*, which is about two leagues long, upon it is no ſpecial thing for to be known, but upon the Eaſt end is a high ſand-hill, ſharp above, the Weſt end is low; as the high ſand-hill is South-eaſt and by Eaſt from you ſo is it round too, upon the Weſt end goeth a ſwamp through.

Betwixt

Betwixt *Baltrum* and *Norderny* runneth in a Channelr called the *Wichtery*, ſometimes therein is two fathom, and ſometimes no more than four foot.

The Depths and Grounds of theſe Places.

At *Meland* men may ſee in twelve fathom the depth of thirteen and fourteen fathom runneth far off to Seawards, ſo that men cannot ſee it in fifteen fathom.

Schiermenk-oogh men can ſee in twelve fathom four leagues off the land.

Rottum and *Borckum* men may ſee in fifteen fathom. Thwart of *Borckum* the Ground is groſs red ſand, mingled with ſome black.

Juyſt-men can ſee in fourteen fathom, three leagues without the land it is twelve fathom.

Buys and *Norderny* men can ſee from the *Poop* in twelve fathom. *Baltrum* you may ſee in fourteen and fifteen fathom.

The Tides, and Streams.

A South-eaſt and North-weſt Moon maketh high Water before the *Scholbalgh*, the *Lawers*, *Schille* and the *Weſter Ems*.

Before *Embden* and *Delfzyl* a North or North and by Eaſt, and South or South and by Weſt Moon.

In

In the *Eaſter Eems* and *Borckum Bælgh* a South South-eaſt and North North-weſt Moon maketh high water.

How theſe Lands do ſhew at Sea.

Ameland *ſheweth thus, when you are two leagues thwart off from it.*

Thus ſheweth Schiermoekoogh, *being two leagues off from you.*

Borckum *ſheweth thus, ſailing along by it ſo far as is aforeſaid.*

Thus ſheweth Rottum, *as you ſail along by, two leagues from it.*

Thus ſheweth the Iſland Juyſt, *being about two leagues off from you.*

The Iſlands Norderny *and* Buys *do thus ſhew themſelves, being two leagues from you.*

Thus ſheweth Baltrum, *you being alſo two leagues off from it.*

XVII. Demonstration.

The Jaa, Weſer, Elve, *and* Eyder, *as alſo the other Channelsbetwixt* Baltrum *and the* Hever.

Langeroogh lyeth a league to the Eaſtwards of *Baltrum*, and is four great leagues long, having on the off-ſide a fair ſtrand, and three or four ſand-hills, whereby men know it, lying from about the midſt, the tops of them are flat. Betwixt *Langeroogh* and *Baltrum* goeth in the *Acumy*, therein lye two buoys. It lyeth out by the foot ſtrand of *Langeroogh*, firſt North-eaſt and then more Eaſterly, but it is not to be truſted to, for it altereth too much.

Betwixt *Langeroogh* and *Wrangeroogh* is *Spykeroogh*, being a league long, upon this Iſland is nothing for to know, but is black with hommocks. Betwixt *Spykeroogh* and *Langeroogh* goeth in the *Oſſebalgh*.

Wrangeroogh is two great leagues by Eaſt of *Langeroogh*, and is a league long, being a plain white Iſland. Upon the Eaſt end lye high broad white ſand-hills. Upon the Weſt end the Earl of *Oldenburgh* hath cauſed to be made a great Tower with two Spires: when they ſtand one right in the other, then you are

are by the outer buoy of the *Weſer*. Men can ſee the Tower two kenning off at Sea. Betwixt *Wrangeroogh* and *Spykeroogh* goeth in the *Harrel*.

The *Acumy* and *Harrel* are ſet both with buoys by the Worthy Counſel of *Embden*, theſe Channels ſerve not but for ſmall ſhips. *The Harrel.*

For to ſail into the *Jade* or Weſter *Weſer* with a ſoutherly wind, run to the ſtrand of *Wrangeroogh* in four fathom, with a weſt wind run no further than five fathom, and lead it in ſo by the Strand of *Wrangeroogh* in four fathom, until you come a good way within, there you find the firſt buoy in five fathom at low water. Thwart of this buoy the red ſand is ſteep, leave it on the larboord ſide coming in, and thwart of the buoy cometh a Tail, ſhooting off the South ſhore, which men might at unawares ſail within in three fathom, the buoy is laid upon the point of this Tail.

The *Stonebalgh* goeth in by Eaſt of *Wrangeroogh*, the South ſide whereof is ſteep, and the North ſide flat, which men may ſound, in this *Balgh* is ten foot by low Tide. From the firſt buoy to the ſecond and the third the Courſe is Eaſt, the ſecond is in two and a half, and the third in three fathom, upon the ſhoaldieſt of the High-way. It is betwixt the firſt and third buoy uneven.

For to ſail from the *Jade* to the *Weſer*, ſo ſail by the third buoy over the ſhoaldieſt of the High-way on Eaſt North-eaſt to the *Mellem* buoy, you have by the third buoy by low Tide no more than nine foot, but being over the ſhoald you get deeper water, and then you are in the *Weſer*. Reckon well your Tides, for the Ebb falleth ſtrong North North-weſt out of the *Jade*, and the Flood inwards very hard. For to ſail up into the *Jade*, leave the foreſaid third buoy on the larboord ſide, and go up moſt South unto *Hommerſcheel*, coming by the dyke it is there wide and broad, without the dyke are two beacons for ſhips that are bound over the *Wad*. Sailing further up keep the Weſt ſhore until you are thwart of the Church without a Steeple, ſtanding by the Dyke, leave there the Weſt ſhore becauſe of the *Aemen*, ſhooting off from the *Veer*, lying *The Jade.*

ſomtimees dry. The Weſt ſhore lyeth moſt South-eaſt.

A South and North Moon maketh here high water, it floweth two fathom.

The Weſer.

For to ſail up the *Weſer*, come no nearer *Wrangeroogh* than in ſeven fathom, edge then off from the ſhore in eleven fathom, and you ſhall find the firſt buoy at the coming into the *Weſer*, lying in ſeven fathom upon the Tail of the Red Sand, *Menſer* Church, being a flat Church, in *Vronkens* Land, is then South South-eaſt from you. As you are thwart of the firſt buoy, and the Weſt end of *Wrangeroogh* being South South-weſt from you, ſo run you over the tail of the Red Sand in five fathom.

From the outermoſt buoy to the ſecond, third, fourth and fifth the Courſe is due Eaſt, theſe all lye in ſeven fathom, the South ſide, being the Red Sand, neareſt each a point different from *Menſer* Church, ſo that *Menſer* Church lieth from the ſecond South and by Eaſt, from the third South, from the fourth South and by Weſt, and from the fifth South South-weſt. The fifth buoy is called the buoy upon the Head; for to know that from the other, thereupon is a ſtaffe of three foot long, and a white knot upon it. Over againſt the buoy upon the Head is a white buoy on the white Grounds. Betwixt all the foreſaid buoys men reckon the Tides, the Flood cometh out of the North-weſt falling over againſt the Red Sand and the Ebb to the contrary. The right deep by the buoys in coming in is eleven fathom, and by the buoy upon the Head five fathom at low Tides.

Menſer Church.

Middle-Plate.

Right before the *Weſer* lieth the Middle-plate, the Eaſtermoſt ſide beginneth right by North of the buoy upon the Head by the white grounds, and is along the reach unto the third buoy, from without, and is on both ſides flat for to ſound about. On the Weſt ſide of the foreſaid Plate lieth a white buoy from *Menſer* Church, leave them in coming in on the larboard ſide from you.

For

For to ſail from the buoy upon the Head out again to the Eaſtwards of this Plate unto the *Elve*. Then ſound it out about the white Grounds in five fathom, until you are out in the Sea.

For to ſail further up in the *Weſer*, the Courſe from the buoy the Head unto the ſixth buoy is South-eaſt and North-weſt, *Menſer* Church ſhall lye from you South-weſt and by South, and the *Weſer* is thwart of it about twenty fathom deep. From the ſixth buoy to the ſeventh, being the buoy upon the Courſe, or *Wapper* buoy, and South-weſt buoy, becauſe *Menſer* Church lyeth South-weſt off from it, is the Courſe South eaſt. The *Jade* buoy is about South, or South and by Weſt from this buoy. From the buoy upon the Courſe unto the *Mellem* buoy the Courſe is yet South-eaſt, which men might ſail within at unawares in ſix fathom. *Menſer* Church lieth off from it South-weſt ond by Weſt. From the *Mellem* buoy to the buoy upon *Bollenziele* the Courſe is South-eaſt, ſomewhat Eaſterly, men muſt there reckon very well the Tide, becauſe the Flood falleth exceeding hard into the Weſt ſhore.

Langworder Church lyeth right South and by Eaſt from the buoy upon *Bollenziele*, over againſt it upon the point of the black Grounds lieth a white buoy, come no near to it by half Floud than in four fathom and a half, men might unawares ſail within this point in ſailing in, in four fathom. From the buoy upon *Bollenziele* the Courſe is South South-eaſt, or South-eaſt and by South, *Langworder* Church lieth about South from this beacon, men muſt leave it on the ſtarboard ſide in coming in, within that beacon upon *Bollenziele* is a good Road for a weſterly wind. From the beacon upon *Bollenziele* to the firſt buoy upon the Flat the Courſe is South-eaſt, until men come ſomewhat beneath the beacon, and then further along Eaſt South-eaſt. The marks of the firſt buoy upon the Flat are, when men might ſee through the Bell-noles of the Steeple of *Langworder* Church, then men are thwart of the firſt buoy, and *Langworder* Church is the from you ſomewhat more Southerly than South South-weſt. *Langworder Church.*

From the firſt buoy upon the Flat to the ſecond, the Courſe

is Eaſt South-eaſt, betwixt theſe two buoys are five beacons on the larboord ſide, upon the Black Grounds. From the ſecond buoy to the *Meyland*, it is South-eaſt and by South, being thwart of *Vadnis* or *Meyland*, ſail by the green ſhore, until you come within *Blixem*.

Like as upon the *Jade* ſo alſo upon the *Weſer* a South and North Moon maketh the higheſt water, it floweth here two fathom and a half, up and down.

To the Eaſtwards of the *Weſer* lye the South Grounds of the *Elve*, therein go two fair deep Balghs of twelve fathom. The Till called the Broad-balgh is the weſtermoſt, and is ſo far, that men can but even ſee the *New-work*.

Souther grounds. If it ſhould happen coming by Eaſt of the *Weſer*, you ſhould be beſet upon the South Grounds, being at leſt ſhore, and be in danger, ſail to the South Grounds in five fathom, and not nearer. When you ſhall get eight and ten fathom ſoft Ground, it is ſo certainly of the Broad-balgh, take the ſounding of both ſides in five fathom, and you find among the ſands ſmooth water. The Weſter Till lieth in firſt Eaſt South-eaſt, by the North ſhore it is deepeſt, and on the South ſhore men cannot ſail within any Tails, in ſailing out, but men can in ſailing in, coming further in it lieth more upon South.

The Eaſter Till is betwixt the Weſter Till and the *Hondbalgh*, running in ſeven fathom in the Eaſtermoſt point, or the old *Schorhorn* being a Tail lying a good way off, wherein men go in ſeven fathom coming out the Weſt, this lyeth alſo in firſt Eaſt South-eaſt. here men take the ſounding on both ſides. Being within you ſhall get ſmooth water off the ſands for all winds.

Hondbalg. The *Hondbalgh* lieth right into by Weſt of the *Schorhorn* buoy. If men will go in there with ſmall ſhips for to ſail over the *Wad* to the *Weſer*, go, having the *Schorhorn* buoy, South South-eaſt. The *Hornbalgh* is without indifferent wide, keep this Courſe until you come thwart of the beacons, which men leave on the ſtarboord ſide, men can well ſound in by the off ſide of the *Schorhorn*, but not the Weſt ſide; by it lie Plates, which men can ſail foul of in nine fathom in coming in.

The

The Iſland Holy-land.

Holy-land and the outermoſt buoy in the *Weſer* lye from one another, South ſomewhat Weſterly and North a little Eaſterly. By clear ſight men may ſee *Holy-land* lying in the *Weſer* by the buoy upon the Head. *Bornriff* and *Holy-land* are aſunder South-weſt and by Weſt, and North-eaſt and by Eaſt two and thirty leagues. Coming from the Weſtwards, and having *Holy-land* in ſight it ſheweth as a high reddiſh ſteep point, being above flat. For to anchor from Weſtwards under *Holy-land*, ſo run in twelve fathom. As men ſail towards the South point, coming nearer to the Land, they eſpy a Rock like a ſmall Tower by the high Land, called the *Monck*, being almoſt ſo high as the Land. About an *Engliſh* mile off this Rock is a Rock under water; if you keep your ſelf in eight fathom, you run without this Rock, and cannot take hurt of of it. As the *Monck* is covered of the other Land, ſo are you thwart of the ſunken Rock, the *Monck* being a handſpikes length without the other Land, there is a Road in ten fathom, for a Weſt South-weſt, North-weſt and North Winds, and fair ground. From the Point by which the *Monck* ſtandeth, ſhooteth off a little Riff, men may ſound it in three fathom, and run in five fathom from the ſhore, and ſail clear off the ſunken Rock and the Riff; but if you run into deeper water in ſeven fathom, men run ſo up the ſunken Rock. In nine fathom men run about without the ſunken Rock.

From the North ſide of *Holy-land* lieth off an evil Riff, almoſt a league in Sea, ſo that men can come no nearer the whole North ſide, than in nine or ten fathom. If you go about by North of *Holy-land*, being ſo far that the Eaſt end of *Holy-land* come to be South and South and by Eaſt from you, ſail then freely to the *Scholvers* Point, being a flat Point, which men may ſound in ſix fathom. If ſo be that you run in eight fathom of it, you ſhall run above two great leagues from the ſhore. The Fareway betwixt *Holy-land* and the *Hever* is no more than ten fathom.

fathom. Coming by the Point to the Road, and that *Scholvers* point lie North-eaſt, and the Rock South-weſt from you, there is good lying in five fathom.

Scholvers Point

Scholvers Point is the Point where the South Haven is within, lying from the high Land Eaſt into the Sea. From the outermoſt end of *Scholvers* Point is a Bank, in three fathom to the Point where the *Monck* alſo ſtandeth, within it is very good lying for Ships of little Draught, and is called South Haven. A South South-weſt and North North-eaſt Moon maketh there the higheſt Water.

The Elve.

THe Road of *Holyland* and the outermoſt buoy of the *Elve*, called the *Schor-tunne* or *Steep-buoy*, lie South-eaſt and by Eaſt, and North-weſt and by Weſt eight leagues aſunder, which lieth right to the Northwards of *Schorhorn*, being the outermoſt end of the *New-works* Grounds. The right deep of the *Elve* goeth into the Northwards of it. On the North ſide of the *Elve* lye the North Grounds, lying ſomewhat flat far off to Seawards; upon the North-weſt ſide. The South end of the North Grounds, called *Vogelſand*, runneth faom the foreſaid buoy a good way Weſt and by North into Sea, with a narrow Tail of a hard Sand, about a half league broad, which waxeth by little and little the the further from the ſhore the deeper: it is three leagues from the foreſaid buoy eleven fathom water upon it, ſailing from the *Steep-buoy* on N. men run over it in 3. fathom, but it doth ſoon deep in eight fathom ſoft ground; it is in the Creek of the North *Elve*. To the Southwards of the *Vogelſand* in the Fareway of the *Elve* coming from the Weſt it is alſo ſoft ground, and thirteen fathom, to the South of it towards the Souther Grounds, it is again very hard and, ſteep Crounds, come no nearer them than in twelve fathom.

Vogelſand.

As you come from Weſtwards to the *Elve*, men find betwixt *Holyland* and the *Weſer* depth of twenty fathom, until well half ways to *Holyland* towards the *Steen-buoy*, then it doth begin

to

to ſhoald from eighteen to ſixteen and fourteen Fathom, cloſe by the *Steen-buoy* it is twelve Fathom.

If you come by night by the ſteep Grounds with a Southerly wind in twelve Fathom, and go on Eaſt and by North you meet at laſt with the ſhoalding of the *New-work* Grounds, right by North of the *Houndbalgh* in eight Fathom; Ankor there, and you are ſo by the buoy. With Northerly winds ſo Ankor further from the South ſhore in the ſhoalding in twelve Fathom.

To the Northwards of the foreſaid narrow Tail, lying from *Vogel-ſand*, runneth in a great bight in the North Grounds, called the Norther *Elve*; it is in going ſomewhat within, ſo broad, that men can therein turn windwards, but within it goeth narrow to, and at laſt to Nothing. It is in going in twelve Fathom, and ſoft Ground like the right *Elve*; by dark Weather ſometimes the Ships run there with danger, eſpecially with Weſt North Weſt Winds. When you perceive that you are entred in there, men can (the *New-Work* being more ſoutherly as South Eaſt and by South from you) run over the Tail of *Vogel-ſand* in five Fathom, and come againſt the *Steep buoy* up the right *Elve*. *Norther-Elve.*

For to ſet Sail by night from the Road of *Holy-land*, the Courſe is South Eaſt and by Eaſt, and ſo men run over the Tail in eight Fathom, being hard and ſandy Ground, if men run ſomewhat more ſoutherly, men have again thirteen Fathom, and ſoft Ground, and the right deep of the *Elve*, betwixt *Vogel-ſand* and the ſteep Grounds; if you run more ſoutherly, you get again ſomewhat Ground of the Souther Grounds: when men come near them in eleven Fathom, edge again off unto thirteen Fathom, and by them towards the *Steep-buoy* unto the Shoalding of *New-Works* Grounds, and ſtay for the day-light.

Coming by day from *Holy-land*, and the *New-works* being in ſight, ſo bring that and the Cape one in the other; Sail ſo right in with them, men find the *Steep-buoy* in eleven Fathom. From the *Steep-buoy* to the *Kool-buoy*, the Courſe is due Eaſt, which s in Eight Fathom. Upon the *New-Work* ſtand three Country- *New-Work.*

mens Houſes, the middlemoſt and the Steeple come in each other coming to the ſecond buoy. The third buoy lieth in ſix fathom, from the *Kool-buoy* Eaſt and by North. The fourth buoy lieth in five fathom from the third Eaſt and by North: betwixt theſe buoys a little within the third runs a deep Creek Eaſt South-eaſt in the *New-works* Grounds, called the *Kinderbalgh*, being wide, and by half Flood well nine fathom, but runneth dry to nothing. Coming by the South Grounds, men can lightly go in there, therefore the third buoy is a little further off from the South ſhoar. Betwixt the third and fourth buoy, by North of the Deep is a white buoy in three fathom, up the Tail of the *New ground*, where men might ſail within, coming inwards; and leave it on larboord ſide, and all the black buoys on ſtarboord ſide from you.

The white buoy and *New-work* lye North North-eaſt and South South-weſt aſunder, by Eaſt of it the North ſide is very ſteep. The fifth buoy is in three fathom and a half, lying from the fourth full Eaſt. The ſixth buoy lyeth in ſix fathom, and from the fifth alſo Eaſt. In the right deep by North of the black buoys from *Kool-buoy* to the Point buoy it is all ſix fathom. Upon the *New-work* is ſet a great beacon 1631. being by the Point buoy, men ſeethis Cape and Steeple South-weſt and by Weſt in each other: from this buoy to the buoy in the *Roſs* the Courſe is South-eaſt, and is lying in eight fathom, the *Roſs* beabeacon coming to the Steeple of *Groen*, you are by this buoy. On the Southſide betwixt the Point buoy and in the *Roſs* is alſo another buoy, it is there exceeding ſteep. Eaſt South eaſt of the Point buoy, over againſt the *Roſs* buoy, ſomewhat inwards is a white buoy, upon the Tail of *Romaerl* Plate, ſail within them in ſailing up in four fathom, as the ſharp Steeple of *Woord* is by Weſt of *Oldenbroeck*, ſo is the ſame South from you, from thence inwards men ſound *Romaerl* Plate in ſix fathom without danger, on the off ſide it is very ſteep.

Ros buoy.

From the *Roſs* beacon to *Brunsbuddel* are five leagues. Betwixt the *Roſs* buoy and the buoy upon *Romaerl* Plate begins a Sand lying in the midſt of the Fareway two leagues long, called *Pilgroms* Sand, on it is no more then two fathom water, and upon it

it lye three black buoys, and over againſt it on the North ſide two white buoys, ſail through them, along by North, being paſt, men come ſo upon the Flat. There lye alſo two buoys, leave them on ſtarboord ſide in ſailing up, before you come to *Brunsbuttel*. All theſe Depths are reckoned at half Flood. From *Brunsbuttel* to the buoy upon *Salſhorn* or *Friburgerſand*, the Courſe is Eaſt and by North by the North-land.

From *Saldſhorn* to the buoy againſt the *Steur* Eaſt and by South, and Eaſt South-eaſt, from the *Steur* to the buoy upon *Gringer-oords* Sand South-eaſt, and South-eaſt and by Eaſt, and lyeth againſt *Bilenburgh* more than half way, in the Deep. Betwixt this buoy and the buoy upon the *Steur* is another buoy in the Fareway. From the buoy of *Gringer-oord* to the buoy upon *Staderſand* South-eaſt and by South, and South South-eaſt. This buoy men muſt leave on the ſtarboord ſide. From *Stader-ſand* to *Willems-fliet*, or the buoy upon the *Luye* it is South-eaſt and S.E. and by S. and from thence to the buoy upon *Terloo* Eaſt South eaſt. From thence to the buoy upon *Hanneball*, the Courſe is Eaſt and Weſt. *The Steur.*

From *Hannebal* to the buoy upon *Blanckeneſſe* Sand is the Courſe Eaſt and Eaſt and by North, and men muſt keep this buoy right with a great Tree, and then run along by the North land ſo long, until that you are paſt the foreſaid buoy. Go then, being at *Blanckeneſſe*, as followeth.

From *Blanckeneſſe* Sand to the buoy in the *Bight* the Courſe is Eaſt South-eaſt, and from thence to *Eckhout* Eaſt and by North, in the right Deep there is four fathom, and there lye the great Ships for to lade and unlade.

The Eyder.

SIx leagues by North of the *Elve* lyeth the *Eyder*, with many ſhoalds lying far off without the Land moſt on the South ſide. On the North ſide by the Land of *Eyderſtee* is a long Sand called the *New-grounds*, on the South of it lyeth *Blawoors*, the *Iron Henry*, the *Hound* and *Heck-ſand*. By South from *Bla-*

woort a league to Southwards of the Mouth of the *Eyder* goeth in a Deep called the *North-pipe*, wherein men ſail, and come again out by the *Hound* up the *Eyder*. In the *Eyder* lye on the South ſide of the deep ſeven black buoys, in ſailing in leave them on ſtarboard ſide. The outermoſt buoy lieth from the ſteep buoy right North. Falling by the Land you ſee to the Northwards of the *Eyder* a ſharp Steeple indifferent high, called *Gardinge*, bring it over the South ſide of the little Sand-hills lying on the North ſide of the *Eyder*, called the *Souther-heads*, they are then from you North-eaſt and by North, ſail right in with them, you fall with the outermoſt buoy, as then the ſharp Steeple of *Weſtinburen*, by South of the *Eyder* in *Ditmarſen*, are caſt a little ſoutherly from you, ſo you have the length of the buoy, and then ſtandeth St. *Peters* Church North North-eaſt from you.

Blawoort. Coming out of the South-weſt up the foreſaid marks, ſo run over the ſhoald of *Blawoort*, lying off from *Blawoort* almoſt half way to *Holyland*, or coming from the North bring the Steeple of *Woeſtinburen* Eaſt from you, ſail right in until *Gardingen* cometh to the *Southerheads*, or St. *Peters* Church be North North-eaſt from you. From the outermoſt to the ſecond, third and fourth it is all one Courſe Eaſt South-eaſt, the ſecond lieth upon the ſhoaldeſt of the Deep at low water in ſixteen foot, the third in four, and the fourth in five fathom.

Theſe three buoys lye by the North ſide of *Blawoort* on the South ſide of the Deep. In ſailing in leave them on ſtarboord ſide. From the fourth to the fifth the Courſe is Eaſt, men can ſail within along to the Southwards of the buoy, to wit, the buoy being ſouthwards from you. Betwixt the buoy upon the *Hound*, and the fourth lyeth another buoy upon the North ſide of the Deep, up the Southermoſt point of the *New-grounds*, run by South of it. From the buoy upon the *Hound* to the ſixth the Courſe is North North-eaſt, and two fathom deep. From

Buoy upon the Hound. the ſixth to the ſeventh North-eaſt and by North, the Deep by North of it is three fathom. Being paſt the buoy, follow the Beacons on the North ſhore to *Hulck*, run then by South of them for to avoid a Tail of Sand coming from the Eaſt ſhore. From *Hulck* to *Sculpenzyl* it is Eaſt South-eaſt, in that reach the beacons

beacons are on the South ſide. From thence to *Tonningen* the *Eyder* is at the ſhouldeſt, and from thence further in towards the New Town, called *Frederick-ſtad*, there is depth enough.

Betwixt the fourth buoy upon the *Eyder* and the fifth ſtand two beacons a little by South of them, the Weſtermoſt upon the Eaſt point of *Blawoort* and the Eaſtermoſt upon the Tail of the *Hound*. Betwixt the two beacons goeth through a Deep South-eaſt or South-eaſt and by Eaſt, you can run through it by the *Irons Henry* beacons, leaving them on the ſtarboord ſide, until you are in the end of the North Pipe, lying from thence Weſt in Sea. Men can ſound comming out of the Sea in the North Pipe by the South ſhore in three fathom, until you come to the foreſaid beacons, and by them North-weſt up unto the *Eyder*.

Along by the North ſhore of the *Eyder* cloſe to the Southwards of the little Sand-hills, the *Souther-heads*, runneth yet a Land-deep Eaſt and Eaſt and by North in, and cometh again out upon the *Eyder* by the *Hulck*; that ſerveth but only for ſmall Ships, there remaineth at low water but five foot.

Of the Depths and Grounds about theſe Places.

BA*ltrum*, *Langeroogh* and *Wrangeroogh* men may ſee it in fifteen fathom. Thwart of *Botjadigerland*, *Keydigerland* and *Ditmarſen* the Grounds lye ſo far without the Land, that you cannot ſee the Coaſts except you climbe up into the top.

About *Holyland* it is eight and nine fathom deep on theinner-ſide, but on the Weſt ſide eighteen fathom: thus men can ſee *Holyland* from the Weſtwards.

The Tides and Streams of these Places.

BEfore the *Weser*, *Elve*, as also in the *Eyder* a South and North Moon maketh high Water, the Flood cometh there out of the North-west, and the Ebb out of the South-east, running over the North Grounds. Under *Holyland* a North North-east and a South South-west Moon maketh high water.

How these Lands do shew at Sea.

Langroogh *sheweth thus, when you sail two leagues off from it.*

Thus sheweth Wrangroogh *when it is two leagues from you.*

Holyland *five leagues from you shews thus.*

Holyland *North-east and by East from you sheweth thus.*

New-work *sheweth thus, at the entring of the* Elve.

XVIII. Demonstration.

The West Coaſt of Jutland *from the* Hever *to* Boevenbergen *and the* Holmes.

FRom the *New-work* to the *Hever* the Courſe is North ten leagues, men meet in the Fareway, at half way, the foreſaid Sand of *Iawoort* in two fathom, there you muſt be careful of the Tides, for to avoid the Grounds, lying far out at Sea, the fore-flood falleth thwart over the Grounds very ſtrong, and the Ebb to the contrary.

For to ſail from *Holy Land* to the *Hever*, go on North-eaſt, ſomewhat Eaſterly, to the Grounds until you come in ſix or ſeven fathom, and then you eſpy the Steeple, called *Pielworm*, bring it North-eaſt and by North from you, a Maſts length to the Southwards of the Southermoſt Cow-houſe upon the Iſland *Nuball*, ſail ſo towards it, you ſhall find the outermoſt buoy, from that to the ſecond buoy go on North-eaſt and North-eaſt and by Eaſt, being there, *Pielworm* Steeple ſhall ſtand to the North-wards, the Courſe is North-eaſt and by Eaſt, inwards you find two beacons on the ſtarboord ſide upon a dry Sand, called the *Quade*, there over againſt cometh the North Balgh *The Quade.*

Balgh in the right *Hever*. From the firſt beacon to the ſecond and third, the Courſe is Eaſt and by North. To the Northwards of the beacons it is full of Sands where men might unawares ſail within, by the third beacon cometh the Souther Balgh in the *Hever*. From the third to the two other beacons the Courſe is North-eaſt and by Eaſt; being paſt, you come by the green Land on ſtarboord ſide, there it is a ſquare and broad Deep, from thence men ſail along amidſt unto *Hoeſum*, and anchor thereabouts.

Wtihout in the *Hever* the North ſide is ſteep, keep the South ſide until you come within the beacons, in the Channel is at half flood two fathom and a half water, and without them it is far flat. Without the *Hever* is a bank, avoid it in ſailing in. A ſouth and North Moon maketh there high Tide.

The South Balgh goeth by South of the *Quade* in, right with the Iſland *Utto*, and by North of it, it is a league and a half to ſail to *Utto*. From *Utto* it lieth in North-eaſt and by North, and cometh out into the *Hever*.

The North Balgh lieth in by North of the *Hever*, about Eaſt and by North from *Pielworm* right in with the Iſland *Nuball*, which men leave on the Larboord ſide, and come ſo into the *Hever*, againſt the *Quade*, men can alſo (coming in at the North Balgh) ſail up to the Northwards from *Nuball* unto the end of *Strand*, until you come thwart of a flat Church, and anchor there.

The Small Deep.

FOur leagues to the Northwards of the *Hever* is the *Small-deep*. For to go off *Holyland* to it, go on North-eaſt and by North, and run to the Grounds, about Weſt and by North from *Pielworm*, the South end of *Aneren* is then North from you, ſeek then to the South Grounds, and you may ſound by them without danger, it is flat riſing ground far without the Land. On the North ſide lye many Sands, Shoalds and Points, lying out, which men may ſail within. Sail along by the South ſide

ſide North and by Eaſt, and North North-eaſt, and North-eaſt, and North-eaſt and by North, and ſo you will find one ſhoald, leave that on the larboard ſide. If you leave it on the ſtarboard ſide, you ſhould run in a dead balg, wherein is at the firſt at leaſt ſeven fathom, and is running to nothing, Men can run by the ſhoald up the lead, until within it; coming then thwart of the ſouth end of *Ameren*, men might unawares ſail within the ſouth grounds behind a ſharp, ſhooting off from the grounds of *Vooren*, therefore keep the ſouth ſide until you come thwart of the Iſland *Vooren*.

The Red Deep.

FOr to ſail in at the *Red* or *Silter Deep* coming from the northwards, or out of the Sea, run in ſight of the Iſland *Ameren*. About the midſt of *Ameren* lyeth a white round hill, a little higher than the other in a low valley, bring it North-eaſt from you, and run in ſo right with it, until within the Riff ſhooting off from *Voortrap*, which is called *Ameren-borne*, and you can take no hurt of it; you have then upon the Point of the Riff three fathom, and within the Riff twelve fathom. Sail ſo in, until the North end of *Ameren* be North and by Eaſt from you, and then run right with the north end of *Ameren*, until you come within the dry ſand, and anchor there, or ſail ſo far in as you will, and ſound it along by the Riff. The ſtrand of *Ameren* is a fair ſtrand without any Tails. When the foreſaid hill upon *Ameren* is Eaſt North-eaſt from you, and you ſail ſo right with it, then you run too near the Riff of *Silt*, the hill is then alſo in two parts, and the northermoſt is then the ſmalleſt.

For to ſail in at the *Red Deep* from *Holiland*, and having gotten ſight of the land, bring the north end of *Ameren* North and by Eaſt from you, until you come betwixt *Ameren* and the Riff of *Silt*; run then in along by the ſtrand of *Ameren*, until you come about the north Point of *Ameren*; and then ſail to the Eaſtwards, until *Ameren* lye South, and South

South-west from you. Sail no further in this Deep to the Eastwards, for then you come against the Island *Vooren*, but well to the Northwards you may sail along betwixt *Vooren* and *Silt*, till you come before *List*. In *Silter* deep, upon the shoaldiest it is three fathom water, being over it, there is again eight, nine, and ten fathom, there lye two Riffs, the one West South-west from *Ameren*, in four fathom, called of the *Juthes Borne*, or *Ameren Borne*, although that it be not fast to *Ameren*, for the Red Deep goeth in betwixt them both. It is not also fast unto the *Voor-traps*, or the South end of *Silt* although it cometh shooting off from it, betwixt them goeth out into Sea a Deep of about fathom and a half, the Fishermen go out dayly there to fish, and especially those of the Island *Vooren*. This Sand is also the outermost Sand of all, which lyeth on this Coast of *Jutland*.

Ameren Borne.

They that use this Coast much, either for *Rypen*, or the quarters thereabout, are very much afraid of this *Amereu-Borne*, when they come off from *Holyland*, they find this shoald about West South-west from *Ameren*.

The other Sand shooteth off from the South end of *Ameren* about South, and South and by West in Sea, called by many the *Borne*, or *Amereu-Borne*.

The Haven of List.

ABout eight Leagues to the Noarhwards of *Silter-deep* lyeth the Haven of *List*, running in by North of *Silt*. For to go in there from South, run so along to the Northwards in seven fathom, until you see a little Island without the Point (lying within these outer Lands) upon which standeth a House, cometh a Masts length without the Point of *List*, go then in East and by South, and East South-east, keep the marks so until you be within the Point of *List*, edge then up to the Southward about the Point, anchoring before the *Vuchts* House, there it is nine and ten fathom deep. At the entring of the deep is a Sand, called *Haef-sand* leave it on the larboord side in coming in, it is flat on the off-side. For to avoid it coming from the North, edge so far

Haef-sand.

far off from the ſhore, untill the red Cliffe comes without the Sandhills, then you may go over *Haef-ſand* with Ships of a little Draught. Likewiſe coming out at the Channel of *Liſt*, to the Northwards, ſail ſo far that you ſee the Cliffe, and then you go over the foreſaid Sand.

On the South ſide of the Channel of *Liſt*, lye alſo two Sands along the ſhore, the Northermoſt is called *Farling-ſand*, the outermoſt *Ruſt*, and lyeth by South almoſt thwart of the red Cliffe, betwixt theſe Sands and the Strand of *Silt* goeth in the Land-deep. For to ſail in there coming from the Southwards, ſeek betimes to the Strand of *Liſt* by the red Cliffe, becauſe of the Ruſt lying off from the North end of *Liſt* a little without the Strand, having the founding of the ſhore, and being ſomewhat within, you meet then a flat from the ſhore, avoid it, and keep along the foot ſtrand, there men take no hurt of it. From the inner Point of *Liſt* goeth a little Riffe, being within the ſame, there men may anchor.

If you will go to *Lutke Tonderen*, leave that Sand (lying by South of *Jureſand*) on ſtarboord ſide, and run through betwixt them both. He which is bound to *Hoeſum* or *Silt* muſt leave that on larboord ſide. Upon *Vooren* ſtand two or three Trees, keep theſe over the Weſtermoſt Church, and run ſo along to *Vooren*. *Lutke Tonderen.*

Betwixt the Ruſt and *Farling-ſand* goeth a fair Channel through, called the *New-deep*, right in to the Southwards of *Rock-ſand*, being a ſhoald, and lying to Seawards. For to ſail in at the *New-deep*, bring the white Cliffe upon *Silt* Eaſt, and Eaſt and by North from you, and run in ſo right with it, and you fall in the *New-deep* betwixt the two banks, leaving *Rock-ſand* on the larboord ſide, run ſo in by the Ruſt, but come no nearer to it than in four fathom, until you are come into the *Land-deep*, but coming againſt the ſhore, and getting ſhoalding off the ſtrand, run in along by the foot ſtrand, as is ſaid by the *Land-deep*.

Betwixt *Haef ſand*, and *Rem* goeth in a little Land-deep of a fathom and a half water. The Iſland *Rem* is three leagues long, and flat on the off-ſide, ſo that you ſhall ſcarce ſee the Land in

ſix fathom. About nine leagues a Seaboord of *Silt* is another Bank along the ſhore of eight fathom, two leagues long. Betwixt this bank and the land it is thirteen fathom deep.

Knuyts-deep, *or* Ryper-deep.

FRom the Channel of *Liſt* to *Ryper-deep*, the Courſe is North and South ſeven leagues. For to ſail into *Ryper-deep*, from the Southwards, run by the flat of *Rem* and *Manu* towards the South end of *Phanu*, called *Sonther-heigh*, and you ſhall ſee two Capes upon a dry ſand, bring the innermoſt a handſpikes length by North of the outermoſt, and then is the ſame East North-east from you, ſail ſo right in, and you will find the outermoſt buoy on the North ſhore in four fathom, and go, leaving them on the larboord ſide, inwards East and by North-East, and East and by South to the ſecond buoy, running by South of it; for thwart of it cometh a ſhoald ſhooting off the North ſhore from the Cape to the ſecond buoy. Or keep the ſounding of the South ſhore, and run by the Lead firſt East and by North, then East, and at laſt East and by South in, upon the ſhoaldeſt it is ten foot a low water, within there it is again eight fathom. Being paſt the Capes, luff up to the Sand whereupon are the the Capes, and anchor there. Behind the Iſland *Manu* it is ſix fathom. With ſmall ſhips you may ſail behind *Rem* to *Jure-ſand*.

The Iſland Rem.

For to ſail into *Ryper-deep* from the Northwards, run on to the South end of *Phanu*, until you eſpy the Capes. This Deep is not the beſt in foul weather, for it is narrow, and far off ſhoald without it. A South South-weſt and North North-eaſt Moon maketh here high water.

About North-eaſt from the North end of *Phanu* lieth a little Hill, called *Luysberg*, a little by North of it is a long plain ſand-hill, called *Langeleg*, from thence lieth the Land towards *Zuyderzee* Weſt North-weſt, and East South-eaſt.

The

The Growe-deep.

THe *Growe-deep* goeth betwixt the North point of *Phann* and *Langeleg*, run in ſailing in from Southwards by *Phann* and the North end of it, being far flat, having deeper water you ſee three hommocks North-eaſt from you, upon the high land, and a flat Steeple called *Holm*, bring the Church a Cables length by North of the hommocks, and go in North-eaſt, and keep the South ſhore, until you come within the dry Sand, called *Smeurſand*, leave it coming in on the ſtarboord ſide. The ſhores are both ſteep, but without the ſhores are flat. Being paſt the point of *Smeurſand*, edge over to *Viſdike*, and anchor there, until you have the loweſt water, ſail then to *Hartingen*, go on forth to *Woerd* lying eight leagues within the land, the River is very crooked, upon which is a Gentlemans Houſe. A South South-weſt and North North-eaſt Moon maketh there high water. *Smeurſand.*

From *Phann* to *Schellingkroegh* it is four leagues, betwixt them is *Zuyderzyd*, a little River of eight or nine foot water. The Land betwixt *Langeleg* and *Zuyderzyd* is ragged with ſandhills, and rough, being grown with ſpire graſs. Falling with the land at *Zuyderzyd*, if you cannot lead into the Channel, chooſe then the land of *Langeleg* in three fathom, and you miſs not of this *Korneg*: for you can ſound here till you come within *Schellingkroeg*, ſailing in four fathom, you run ſo without the dry ſand. *Schellingkroeg* lieth moſt in North-weſt. Coming from the North, and being bouud in this Haven, run by the dry ſand in three fathom; being by the inner point of them, here ſhooteth off a little Tail of Sand, which you may ſee; coming to the Eaſt end of this ſand, luff up about, until you come into the *Kroeg*, and anchor there. A South South-weſt and North North-eaſt Moon maketh high Tide.

At the North end of the foreſaid dry ſand is *Dodenbergh*, lying alone: being ſomewhat off from it, it lyeth under the other land, that you cannot ſee it, but as you come from the South and *Dodenbergh.*

North

North you may ſee it. From *Doodenbergh* to the South end of the dry ſand it is all along a fair ſtrand and flat ground.

A little to the Northwards of the *Doodenbergh* is the point, called the *Horn*, by South of it is the Coaſt Eaſt South-eaſt to the *Growe-deep*, by North of it North to *Weſterzyd*, being a Village betwixt *Blawebergh* and the *Horn*.

By this Point, or *Horn*, runneth off a long Bank, twelve leagues Weſt South-weſt in Sea, called *Reefſhorne*, lying at ſome places dry: Coming from the Northwards with a ſhip of a great draught take heed, for it is upon the North ſide very ſteep, that men ſhall have one caſt two and twenty fathom, the next caſt fifteen, and the third caſt no more than three fathom.

Falling with the Land with *Weſterzyd*, or by North of *Reefſhorne*, then ſound by the ſhore in ſeven fathom, until you come by the *Horn*, you ſhall find alſo then another ſhoald Riff, running off the Land, called the *Owle*, being on the North very ſteep, come no nearer it from the North ſide than in ſeven fathom. A little by South runneth *Reefshorn* off the ſhore, it is there a narrow Bank.

Reefshorn. According to the opinion of ſome, *Doggers-ſand* beginneth from this Bank, ſailing in the moruing out of *Rinkopper-deep* with a South-weſt way and a North-eaſt wind, you are about four of Clock in the afternoon yet in nine fathom, whereby appeareth the beginning of *Doggers-ſand*.

The *Blawenbergh* is by North of the *Horn*, and by South of them is the Fiſhers Village *Weſterzyd*, betwixt that and the *Horn* is one black Hommock, and alſo a Gentlemans Houſe, otherwiſe the Land is altogether full of Hommocks thereabouts.

Rinkop-

Rinkopper-deep.

TO the Northwards of *Blawenbergh* lieth three or four low white ſandhills, and and by the Haven of *Numen* alſo two great white ſandhills cloſe one by the other. To Northwards of theſe ſandhills runneth in the Haven of *Numen*, the Land is, by the Haven of *Numen* and *Doodenbergh* moſt South, and North ſeven leagues, all a fair ſtrand, and the beſt to be known of this Coaſt, is the foreſaid *Blawenbergh*, and theſe two white ſandhills.

For to ſail into *Rinkopper-dee*, or Haven of *Numen* run along by the Land of *Weſterzyd* in ſeven fathom, until you come by the two foreſaid great white ſandhills, ſo you ſhall ſee upon a low land two Capes, upon each of them ſtandeth a barrel. Bring them in each other, and they ſhall ſtand North from you, ſail in right with them, and you ſhall find a buoy, except it be laid ſomewhere elſe. Right before the Haven of *Numen* is a Sand-plate, named *Gladde Jaep*. *Gladde Jaep.*

For to ſail in the Souther Channel, leave this Plate on the larboord ſide, and run in cloſe by the South ſhore, or foot ſtrand, where the aforeſaid white Sandhills lie upon, right with the Capes, and there you cannot do amiſs, but run in boldly by it, upon your lead; it is the ſureſt way of all to ſail in along by the ſtrand, being careful of the lead.

Being paſt *Gladde Jaep*, run towards the North ſhore, you may ſail about by it as cloſe as you will, it is a low plain Point, altogether clean, and very ſteep. When you are within the Point, you may anchor where you pleaſe.

From *Rinkopper-deep*, or Haven of *Numen*, to *Boevenbergen*, the land is almoſt North and South, ten leagues, there is all along betwixt them a very fair and clean ſtrand, with white ſand-hills, and grown with ſpyrie graſs.

When you ſail along by it, then you may ſee the blew double land of *Rinkoppen*, called the *Holmes*, over this land.

Betwixt *Boevenberghen* and the *Reafshorne* lye ſome banks upon

upon eight and nine fathom, and there lye alſo ſome banks, which are deeper, which men may ſound with the lead.

The Boevenbergh. *Boevenbergh* is a long ſmooth hill, having in the midſt a high round hill, or hommock, and upon it ſtandeth a Church with a Steeple, when you come thwart to land with *Boevenbergen*, it ſheweth it ſelf in three hills, whereof the middlemoſt is the higheſt, upon which ſtandeth the foreſaid Church, with a flat Steeple, upon both ſides of them ſtandeth alſo another Church, but they are not ſo high, you may ſee the Land in thirteen and fourteen fathom, the Ground is groſs red Sand, and wherein are alſo ſome little ſtones for to know the Ground by.

When as *Boevenberghen* is Eaſt North-eaſt from you, it ſheweth and repreſenteth it ſelf in a long hill, having ſome dale, or valley in the midſt on the North ſide, and a Church, as alſo a Church on the South ſide, and having yet another hill, or hommock, lying to the Northwards of the ſame.

From *Boevenberghen* to the *Holms* the land lies North North-eaſt ten leagues, betwixt them it falleth in with a bight, it is black land with hommocks, here and there ſtandeth a flat Steeple in the Land. About five leagues from the Land is a bank of ten fathom. Betwixt *Boevenberghen* and the *Holms* lieth the great *Juttiſh* Riff Weſt into the Sea, running over it in thirteen fathom; the *Naze* is from you North-weſt and by North twenty four leagues, running over it in ſeventeen fathom, you can ſee the Land on the North ſide being groſs Sand, and on the South-ſide ſtony, like as Peaſe and Beans.

From *Boevenberghen* Weſt North-weſt eight leagues it is ſixteen fathom deep, groſs ſtony ſand Ground, from the Land ten leagues it is twenty fathom. From *Boevenberghen* South-weſt and by Weſt nine leagues it is twenty five fathom, red and black ſand Ground, that is the Ground of *Doggers-ſand.*

The Depths and Grounds of theſe Places.

THe Grounds of the *Heaver* and the Banks of the Small Deep without *Strand* and *Eyderſtee* lye, at leaſt two leagues without the Land. Betwixt *Ameren* and *Holyland* it is ten fathom deep. *Strand* is be known by the ſteeple of *Pielworm*, ſtanding upon the South end of the Land. Upon *Strand* are more Churches and Steeples, but not ſo eaſie to be known.

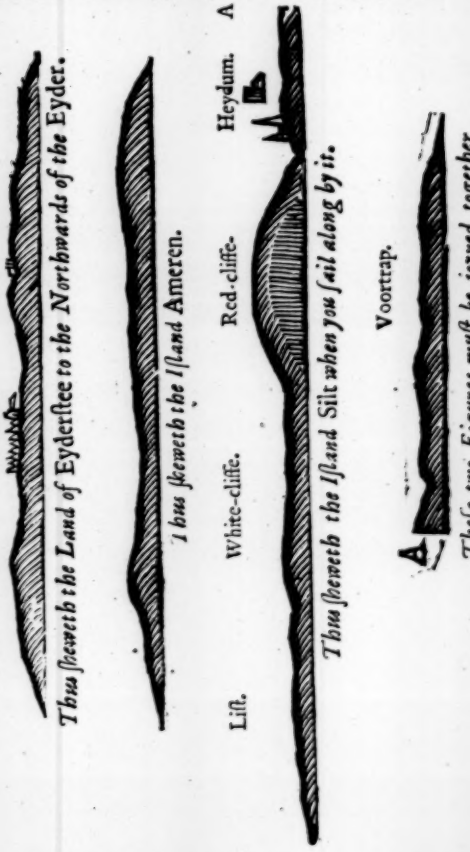
The Iſland *Silt* you may ſee in ten fathom, on it is a high ſteep red Cliffe, upon the South ſide ſtandeth a flat Church with a low Steeple, and to the Eaſtwards of it another Church, called *Heydum*, the North end of the Iſland is called *Liſt*, and the South end *Voortrap*.

The Tides, and Streams.

IN the *Pipe*, *Eyder* and *Hever* a South and North Moon maketh the higeſt water, the Flood cometh there out of the North-weſt, and the Ebb of the Southeaſt, you may run there over the North Grounds. In the deep of *Silt* a South and North Moon maketh the higheſt water, the Flood cometh there out of the N. weſt, and falleth very little alongſt the Land, and the Ebb to the contrary.

In *Knuyts-deep* a South South-weſt and North North-eaſt Moon maketh here high water, the Flood cometh there alſo out North-weſt, and falleth but a great quarter tide along the Land, and the Ebb to the contrary.

In the Haven of *Zuyderzyd*, the *Growe-deep* and *Schellingkroegh*, a South South-weſt and North North-eaſt Moon maketh the higeſt water, the Flood cometh there alſo out of the North-weſt, and falleth over the *Reefſhorn* towards the *Futtiſh* Iſlands, and the Ebb again to the contrary, off from the Land into Sea.



Dooden-

Thus ſheweth the Land of Zuyderzyd *to the Southwards of* Doodenbergh.

Theſe two Figures muſt be joyned together at A A.

Thus ſheweth the Land betwixt Doodenbergh *and the Channel of* Numen.

XX. Demonstration.

The Juttiſh *Coaſts betwixt the* Holms *and the Point of* Schaghen.

THe *Holms* is a plain point going down ſteep on the North eaſt ſide, upon the middeſt of the Hill ſtandeth alſo a ſquare Church without a Steeple. When the higheſt of the Land is S. South-eaſt from you, and you can but even ſee the North end of it, it is ſixteen fathom deep, groſs rough ſand, and ſome little ſtones amongſt it.

Two leagues North-eaſt, or as ſome ſay, ſomewhat more Eaſterly off from the North Point of the *Holms*, to wit, betwixt the North Point and the *Holms*, lieth a ſtone-bank.

From the *Holms* to *Robbeſnot*, or *Robbeknuyt*, the Courſe is North-eaſt nine leagues.

The foreſaid ſtone-bank lieth in manner as the Trindel of *Leſon*, upon which there is no more than twelve foot water, ſo that there remaineth about two third parts of the water betwixt the ſtone-bank and the North point, and the other third part betwixt the Eaſter point and the foreſaid ſtone-bank: there have divers ſhips been loſt upon it. The foreſaid Eaſter Point lyeth about four leagues to the Eaſtwards of the *Holmes*, and is alſo a high ſteep Point, like the *Holmes*. Right thwart of this Eaſter point

point ſhooteth off a Riff almoſt a league off into Sea, which men may ſound about in ſeven fathom. Some ſay that men may ſail through betwixt this Riff and the Land.

A little to the Weſtwards of *Robbeſnot* in the bight towards the Eaſtet point, neareſt to *Robbeſnot*, are five Churches, with flat Steeples. There lie alſo two blew ſands betwixt the Eaſter point and *Robbeſnot* in the bight, you may ſee alſo a cloven hill, or ſand-hill, before you come to *Robbeſnot*. It is there all along a flat ſtrand. To the Eaſtwards of the *Holmes* goeth in a little River called *Miſdorp*. A little to the Weſtwards of the white Cliffe, or of *Robbeſnot*, runneth in alſo a little River, whereupon lieth a little Town, called *Werlom*. *Robbeſnot.*

Robſnot, or *Robbeknuyt*, is a high round hill, on the top whereof ſtandeth a Church with a ſharp Steeple. The Land falleth away to the Eaſtwards from this point with a great bight towards *Hartſhals*.

From *Hartſhals* to *Schawe* or *Schaghen* it is Eaſt North-eaſt eight leagues. As you come about *Schawe* from the Weſtwards and are bound to the *Sound*, or the *Belt*, you muſt take an eſpecial care of the Tide that cometh out of the *Belt*, falling commonly out of the *Belt* towards *Norway*, eſpecially when the Wind hath blown a while Eaſt North-eaſt, it can carry a ſhip by night, or dark weather, under *Norway*, before men ſhould think of it. It did happen, that a ſhip coming thwart of the Riff of *Schawe* ſo that the Riff did lie South-weſt from her, had driven with calms in eight hours, until ſhe came within three leagues of the Land, near about North-eaſt of *Harmenſhooft*, five leagues by Weſt of *Mael-ſtrand*, ſo ſtrong current there did ſhoot along by the Riff towards the North-eaſt, although it doth ſeldom happen, that the Tide doth run there ſo ſtrong out. *Schaghen.*

XX. Demonstration.

The Coaſt of Norway *from the* Soenwater *to* Fleckery, *and from thence unto* Bergen.

FRom the Iſland *Farder* to the *Soenwater* the Courſe is North, but from *Baſt* North and by Eaſt. The *Soenwater* goeth in moſt North, upon it lie many Havens and landing places, moſt on the ſtarboord ſide as you come in. Firſt, there is *Moſſound*, a Haven that goeth up to the Eaſtwards, and there is *Wykerſtee*, being a bight behind an Iſland; afterwards, *Ship-hill*, a ſand Bay and a very good Road, it goeth ſo up along to the Northwards into *Anſlo*, and then it runneth about to the ſouthwards in the bottom.

Soenwater. When you ſail from *Farder* to *Baſt* unto *Soenwater*, you ſhall meet with a Red Point betwixt the *Soenwater* and the *Coperwijck*. He that is bound into *Soenwater* muſt run along to the weſtwards of it, and leave it on the ſtarboord ſide. When you come within the *Lams*, you ſhall eſpy a little Church upon the weſt land, there is the lading place of the *Coperwijck*, Men may ſail up from thence to *Brakenes*. On the North or Eaſt ſide lieth *Holmſound*. From *Farder* to the Point of *Roghe* the Courſe

Courſe is North North-eaſt five leagues. At the end of *Roghe* you may anchor, there is a plain ſtrand, you may run through betwixt the *Roghe* and *Calf*, but anchor under *Fletto*, then you muſt run ſtrait through within the two ſmall Rocks.

From *Baſt* unto the *Suſters* the Courſe is South-eaſt five leagues. To the Southwards of the Point of *Roghe* lieth the Haven of *Elfang*, diſtant from the Iſland *Farder* North eaſt and by Eaſt five leagues. When you come off from *Farder*, you muſt run through within the Rocks, which lie within the *Suſters*, until you come againſt the land, you find then a great gray Rock, leave them on the larboard ſide, and the ſmall Rocks lying there on ſtarboard ſide, and ſo by the Weſt land, and then the Haven open it ſelf, being narrow, and ſoft Ground.

From the *Naze* (that is the Southermoſt point of *Norway*) Weſtwards the Coaſt is along by the Land of *Leeſt* Weſt North-weſt, but to the Eaſtwards of it (without the Rocks until you are paſt *Flecker*) Eaſt ten leagues, from thence to *Longſound* North-eaſt about ſixteen leagues. *The Land of Leeſt.*

This Coaſt is all along of high ſteep ſtony Hills, and without it full of many Rocks very ſtrange to behold, but it hath many fair deep Havens, and good anchor ground, wherein a great abundance of boards are laden.

The firſt Haven by Eaſt of the *Naze* is called the *Cow* and *Calf*, after two high hills, eaſie to be known, the one is greater than the other, lying within the Haven upon the high land. He that will ſail into this Haven from the Weſtwards, meet with a great Rock by Eaſt from the *Naze*, named *Melyn*, whereupon is a Warder, being paſt that, you ſhall find another out Rock, whereupon ſtandeth alſo a Warder, called the *Sparrels*; betwixt theſe two out Rocks you muſt run into this Haven the *Klo*, when you come againſt the *Sparrels*, there lieth a ſunken Rock under water, whereof you muſt take heed.

Somewhat within the *Sparrels* is another Rock in the fareway above water, leave them on ſtarboard ſide. In ſailing in ſo the Haven doth open it ſelf, by little, and little, edg up to the Weſtwards *Sparrels.*

wards about the Point, and Anchor there in a ſand Bay in ſixteen fathom, ſo that the two hills the Cow and the Calf ſtand about North-eaſt from you.

A little to the Eaſtwards of the *Sparrels* is a Haven called *Scarſound* or *Weſtryſen*, for to ſail in there leave the *Sparrels* to the Weſtwards on larboard ſide, and all the great *Holmes* to the Eaſtwards, on the ſtarboard ſide. Run ſo inwards till you come to the Haven.

Four leagues to the Eaſtward of *Scarſound* lyeth the Iſland *Holiſound*, whereupon are two great Warders; ſail in to the Weſtwards of it until you be within it, and Anchor under the ſame. Thwart of it runneth in a great Sound into the land, wherein you can ſail and lade.

Fleckery. About three leagues Eaſt North-eaſt from *Holiſound*, and eight leagues to the Eaſtward of the *Naze*, is the Iſland and Haven of *Fleckery*, you can ſail in on both ſides of the Iſland into the Haven of *Fleckery*. The Weſtergate goeth in North North-eaſt: when men come off from *Holiſound*, then you ſee open into the Sound, you muſt ſail along by the Rocks without *Holiſound*, until you come within the Iſland *Fleckery*, and edge then Weſtwards toward the land, until you come within the *Diveholm* where the Gallows ſtandeth, and Anchor by the Weſt land in eighteen fathom. You muſt bring out there an Anchor a head, and make a Cable faſt on the Rocks upon the land. You may run from thence to the Eaſtwards of the Iſland *Fleckery*, and out again at the Eaſtergate Eaſt North-eaſt into the Sea, leave then the little Iſland within the Warders, lying at the E. end of *Fleckery*, with all the great rocks by it on the ſtarboard ſide, and all the black *Holmes* on the larboard ſide.

The Naze. From the *Naze* to the land of *Leeſt* the Coaſt lyeth Weſt North-weſt. To the northwards of the land of *Leeſt* three leagues lyeth the Iſland *Winſoerd*, you go by the ſouth of it into the Haven of *Winſoerd*, it runneth North-eaſt in. A league to the Seawards of *VVinſoerd* lye two Rocks, named the Fockſtones, and by the North of *VVinſoerd* you may run into *Borgſound*, the Channel goeth Eaſt North-eaſt in. By the North of *Borgſound* two leagues lyeth *Eckſound*, a fair Haven, and

and from thence to Weſtwards is the Haven, called *Seerenog*, to the Northwards of it is a white ſtrand, whereupon is a Church at the outer point of it, and there lieth alſo a great Rock, named the *Walbert*, being over againſt the South point of the *Jedder*. The *Jedder* is four leagues long, upon every point of them is a Church, and there ſhooteth alſo off theſe points a Riff, the Northermoſt Riff runneth Norh-weſt into Sea, and a half league North North-weſt of this Riff lieth a Rock, you may ſound by it on both ſides Thwart of the *Rutter* into Sea is the *Veeſteen*, about four leagues by North of the *Jedder*.

From the *Veeſten* North North-eaſt about four leagues lieth an Iſland before the *Fioerd* of *Stavanger*, named *Sybrich-ſteen*. For to ſail into *Stavenger* from the Southwards, leave the *Veeſteen* on ſtarboard ſide, and go by North of it betwixt *Veeſten* and *Witings-oogh*. From the *Veeſteen* to *Schuytenes* the the Courſe is North North-weſt four leagues. Three leagues to the Seawards of *Schuytenes* Weſt, and Weſt and by North lye the Rocks, called by the Seamen the *Wiſiers*.

XXI. Demonstration.

For to ſail through the Lieth *unto* Bergen.

THe *Lieth* of *Bergen* goeth through betwixt the Iſland *Schuytnes* and *Bock*, when *Bock* is North-eaſt from you, ſo you are right before the *Lieth*. *Schuytenes* lieth on the Weſt ſide, and *Bock* on the Eaſt ſide, it runneth in firſt North, and North and by Weſt two leagues unto *Peerdeholm*, or the great *Warder*, by the ſame is a good Road. From the *Peerdeholm* to *Flocks* the Courſe is North, and North and by Weſt three leagues. The *Flocke* lieth right without *Longhol*, which is a good Haven, and it is there fifteen fathom deep.

Bommel-haven. Over againſt the *Flocks* lieth *Bommel* Haven, and there is alſo a fair Haven, and the *Boomel-ſound* runneth through the *Bommel-head* Seawards, being a high hill, and lying on the North ſide of the Deep, but on the South ſide lie many little Holms and Rocks, the Channel runneth South-eaſt and South-weſt and by Weſt into Sea.

From the *Flocks* to *Bremer-holms* the Courſe is North North-weſt two great leagues. To the Southwards or Weſtwards of it lieth *Monſter-haven*, there ſtandeth a Church, and here is a good Road for ſhips.

From *Bremer-holm* to *Root-holm* the Courſe is North North-weſt three leagues, by South of *Root-holm* goeth out the *Soltmer-fioerd*, going South-weſt Seawards. Upon the Land of *Bommel* ſtandeth a high round hill, named the *Syck*, and hath the form of

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an Hood, whereby you may know the *Bommel* and *Soltmerſioerd*, for the ſame lieth right betwixt them both.

From *Root-holm* unto *Krabbe-church* the Courſe is firſt through the narrow North-weſt one league, and then further to *Krabbe-church* North and by Weſt two great leagues, betwixt them both lieth the *Reyneck-naep*, you may ſail through on both ſides of it. About right South from the *Reyneck-naep* run two Channels into Sea, to wit, *Papeſound* and *Stormſound*. *Papeſound* goeth South South-weſt ſeawards. As you ſail out from *Stormſound*, go then cloſe alongſt by the land of *Root-holm* South and by Eaſt, leaving all the broken Iſlands and Hills, with that great Iſland on the ſtarboard ſide from you, until you come into *Soltmerſioerd*, the ſame runneth there S. and S. and by W. into Sea. *Root-holm.*

From *Krabbe-church* to *Bock* upon *Ra*, or *Bocklieth*, the Courſe North-weſt and by North two leagues, betwixt them goeth the *Kruysſioerd* South-weſt into the Sea.

From *Bock* upon *Ra* you ſail through the narrow Sea, and right by N. of *Bock* lieth a Rock under water, whereupon ſtandeth a Beacon, or Warder. From *Bock* upon *Ra* to the *Watge-ſtream* the Courſe is N. ſomewhat weſterly three great leagues, there is good anchoring on the S. ſide in 24. fathom. In the *Watge-ſtream* goeth the *Lieth* N. W. to the *Reeſteen*, over againſt it lieth the Holm of S. *Olof*, you may run by it N. W. of *Jel-ſioerd* by Weſtwards of *Aſland* into Sea. When you come out at Sea in *Jelteſioerd*, then you come right againſt the *Reeſteen* upon the *Lieth*. The *Reeſteen* is on the Eaſt ſide of the *Lieth*, right over againſt the point, where are two Hills, called the *Letorens*, being two ſharp Hills, which you may ſee far off, in ſailing up the *Lieth*, when you go upwards they are moſt N.N.W. and N. and by W. from you.

Within *Aſland* lieth *Strays-eaven*, and it is from thence to the Town of *Bergen* North North-weſt two leagues.

FINIS.